



125 S. Wacker Drive, Suite 600
Chicago, IL 60606
T: 312-346-5000

Transmittal

To: Mr. John Nordine **From:** Jon Meyer
Organization/ Address: USEPA Region 5 **Date:** August 1, 2016
77 West Jackson Blvd., DE-9J
Chicago, IL 60604-3590
T: 312-353-1243
Re: Milwaukee Metropolitan Sewerage District (MMSD) West Basin Phase 1 Project
Job #: 3320-112047.CON.O&M
Via: Mail: Overnight: Courier:

Enclosed please find:

- | | |
|--|---|
| <input checked="" type="checkbox"/> For your information | <input type="checkbox"/> Approved |
| <input type="checkbox"/> For your review | <input type="checkbox"/> Approved as noted |
| <input type="checkbox"/> For your signature | <input type="checkbox"/> Returned to you for correction |

Message:

John,

Included is a CD containing an electronic version of the Soil Management Plan for the West Basin Phase 1 Project as referenced via email by Carl Johnson on July 29, 2016.

Thanks,

Jon Meyer

Signed

A handwritten signature in black ink, appearing to read "Jon Meyer".

Nordine, John

From: Hnat, John J - DNR <John.Hnat@wisconsin.gov>
Sent: Thursday, July 21, 2016 4:10 PM
To: Nordine, John
Subject: RE: soils management plan - Former Bee Bus Line Property, Milwaukee, WI
Attachments: ATT00001.htm; removed.txt

John,

Yes, I've just sent them a reply to their plan and I want them to finalize the additional soil sampling plan that includes the > 50 ppm PCB areas. See attached email.

 *J. Hnat. C.P.G. P.G..*

Project Manager/Hydrogeologist
Remediation and Redevelopment Program
Southeast Region Headquarters
Wisconsin Department of Natural Resources
( phone: (414) 263-8644
( fax: (414) 263-8550
( e-mail: John.Hnat@wisconsin.gov

We are committed to service excellence. Click [here](#) to evaluate how I did.

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From: Nordine, John [mailto:nordine.john@epa.gov]
Sent: Thursday, July 21, 2016 4:00 PM
To: Hnat, John J - DNR
Subject: soils management plan - Former Bee Bus Line Property, Milwaukee, WI

Hi John,

Is there anything new or progress with PCB or new plan out yet?

Respectfully,

John Nordine, CPG, LPG
U.S. EPA, Region 5
RCRA Corrective Action Section
77 W. Jackson Blvd. LU-9J
Chicago, Illinois 60604

Phone: 312-353-1243
Fax: 312-385-5338

"The great end of education is to discipline rather than finish the mind; to train it to use of its own powers rather than to fill it with the accumulation of others." Tryon Edwards

"Don't interfere with anything in the Constitution. That must be maintained, for it is the only safeguard of our liberties" Abraham Lincoln

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PCB MANAGEMENT PLAN

To: Mr. John Hnat, P.G.
Hydrogeologist
Remediation and Redevelopment Program
Wisconsin Department of Natural Resources
2300 N. Martin Luther King Drive
Milwaukee, WI 53212

Date: October 7, 2016

Re: Soils Management Plan – PCB Hazardous Waste
MMSD 30th Street Corridor Wet Weather Relief – West Basin – Contract W11031C01
West Basin (Parcels 11 to 16), Milwaukee, WI
DNR BRRTS # 02-41-576619
DNR BRRTS # 02-41-576602
DNR BRRTS # 03-41-226492

Dear Mr. Hnat,

Himalayan Consultants, LLC (Himalayan) was retained by Michels Civil (Michels), a division of Michels Corporation to provide environmental services during construction of a stormwater detention basin, known as the West Basin, on land identified as Parcels 11 to 16 adjacent to North 35th Street and Lincoln Creek.

1.0 Introduction

This proposed stormwater detention basins are part of the Milwaukee Metropolitan Sewerage District (MMSD) 30th Street Wet Weather Relief Project. In 2016, MMSD is planning to construct two stormwater detention basins on the east and west sides of the railroad corridor on North 30th Street. The West Basin, encompasses Parcels 11 to 16 located at 4250 – 4350 N. 35th Street. These properties were a former railroad yard, a former scrap yard, and former site of the Bee Bus Company. The properties also include the above referenced LUST and ERP sites. All buildings in the West Basin have recently been razed. Phase 1 work includes site preparation activities and removal of the following: concrete foundations, pavement, two underground storage tanks, and identified hazardous and impacted soil materials. The completed Phase 1 Interim Basin will be constructed with berms and fencing around the perimeter, re-vegetated with No Mow Grass, an antenna tower access road, and installation of several groundwater monitoring wells.

Phase 2 is planned to be designed in 5 years, and construction is tentatively scheduled for 2024. Phase 2 will involve completion of the stormwater detention basin on Parcels 11 to 16 plus additional land that will be acquired to the south. MMSD plans to complete a Site Investigation and Remedial Action Options Report for the West Basin during the design phase of Phase 2, to assess sources of contamination and remediation progress initiated in Phase 1 and identify additional remedial actions required for site closure.

Previous environmental investigations conducted by K. Singh & Associates, Inc. (KSingh) have identified the presence of chlorinated hydrocarbons, petroleum hydrocarbons, polynuclear aromatic hydrocarbons, RCRA metals, PCBs, and Pesticides in soil and/or groundwater at concentrations exceeding WDNR standards. Soils at the site, surrounding the area to be excavated and replaced, consist of stiff to hard silty clays. These clay soils exhibit extremely low permeability. Bedrock was encountered at approximately 12 feet below ground surface in Parcel 11 and the northwest portion of Parcel 12 [Ref. 1].

Michels has been contracted by MMSD to construct the Phase 1 Interim West Basin. As part of the construction activities, Michels plans to excavate the following quantities of material to a depth of up to 12 feet below the existing grades:

- 1,000 cubic yards hazardous material (Soils contaminated with PCBs > 50 mg/kg)
- 44,000 cubic yards special waste (Soils contaminated with PCBs < 50 mg/kg, chlorinated hydrocarbons, petroleum hydrocarbons, PAHs, Pesticides, and RCRA metals)
- 16,000 cubic yards of low hazard soils (contain PAHs which only exceed direct contact standards, Selenium less than 2 mg/kg, and Lead less than 50 mg/kg)
- 6,000 cubic yards of soils with no detected impacts.

According to KSingh's Soils Management Plan / Interim Remedial Action Plan, dated April 4, 2016, MMSD proposes the following activities for these materials:

- 1) dispose of the hazardous material at a hazardous waste landfill,
- 2) dispose of the special waste at a special waste landfill, and
- 3) re-use the low impact soils and soils without any detected impacts on site as part of construction of the West Basin.

Please refer to KSingh's Soils Management Plan for the disposal of special waste and re-use of low impacted soils. As a supplement to the Soils Management Plan, Himalayan has been requested to provide a PCB Management Plan for the soils designated as hazardous material.

2.0 PCB Management Plan

2.1 Pre-excavation Groundwork

Michels will be responsible for controlling run-off/run-on around the excavation envelope denoted as 'Potential Hazardous Material', as shown on Figure 14 in KSingh's Soils Management Plan. The location and dimension of the run-off/run-on controls for 'Target Areas 5, 5A, and 5B' may vary, based on Himalayan's recent exploratory boring results (Target Areas illustrated on Figure 1). Michels will utilize sediment controls such as silt sox, straw wattles and inlet protection to keep sediment on site. Michels will intercept and divert surface drainage away from the work site by the use of dikes, curb walls, ditches, sumps or other means. The surface drainage systems will be constructed so that they limit soil erosion and prevent entry of surface water runoff into the excavations and off the site. Storm sewers within the construction site will be blocked off to prevent surface drainage from entering the storm sewer system. In addition, when contaminated soils are removed for off-site disposal, Michels will control loading pad operations at the excavation to prevent future potential cross-contamination (e.g. contamination beyond the excavation limits).

2.2 Dust Suppression & Dust/Vapor Monitoring

Visible dust generated by excavation activities should be controlled at all times via soil wetting or other method. Over-spraying of water as a dust control measure must be avoided to help control run-off and erosion. During excavation dust and vapor levels will be monitored via: 1) real-time instrumented organic vapor monitoring of air in the breathing zone of all excavations will be conducted using a photoionization detector (PID) equipped with an 11.7 eV lamp or equivalent capable of measuring vapor concentrations as low as 1.0 part per million to ensure adequate protection to workers; and 2) real-time instrumented dust monitoring of air in the breathing zone must be utilized at upwind and downwind monitoring stations along the property lines to ensure the protection of workers and the general public. A downwind dust monitoring station will be set up. The monitoring station location will be determined on a daily basis using site specific meteorological data. The station will be outfitted with a real-time particulate monitor for monitoring of Total

Particulate (TSP/PM) concentrations in ambient air (TSI DUSTTRAK II Desktop 8530 Dust/Aerosol Monitor or Performance Equivalent Unit).

The monitoring results will be compared to an action level of 150 $\mu\text{g}/\text{m}^3$ (24 hour average) for TP/PM. If dust concentrations are greater than 150 $\mu\text{g}/\text{m}^3$ (24 hour average), increased dust suppression measures will be implemented to reduce off-site dust. The station will also be outfitted with an air sampling pump and filter cartridge for testing PCBs in air by NIOSH 5503 (Sensidyne BDX-II Pump).

- Action Level - PM-10 Dusts

The Action Level for PM-10 dusts generated by excavation activities is 150 $\mu\text{g}/\text{m}^3$, i.e., EPA's National Ambient Air Quality Standard for the 24-hour average concentration of PM-10 dusts. If the PM-10 Action Level is exceeded, Michels must mitigate dust generation via soil wetting. As indicated previously, over-spraying of water must be avoided to help control run-off and erosion.

- Action Level - Organic Vapors

The Action Level for Organic Vapors generated by excavation activities is 5.0 parts per million (ppm) based on readings from a photoionization detector calibrated daily, at a minimum, to an isobutylene standard. Exceedences of the organic vapor Action Level will require Level D work stoppage until levels return to sub-threshold levels, after which work in Level D will resume. Readings consistently above the organic vapor Action Level will require a Personal Protective Equipment (PPE) upgrade to Level C protection.

- PCB air sampling - NIOSH 5503

NIOSH FDA recommends a 10-hour TWA of 1.0 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) for PCB-laden dust particles. Due to the delayed response for test results, PCB concentration results will not be used as an Action Level. The test results will only be included in the remedial action report for quality assurance that excessive PCB-laden dust has not been generated during excavation activities.

2.3 Soil Excavation and Dewatering Management Procedures

During excavation, Himalayan will maintain a log of soils excavated within Target Areas 5, 5A, and 5B and document the final disposition of those soils (e.g., soil shipped off-site). Excavated soils must be visually inspected to evaluate the soils for consistency with the environmental characterization work previously performed and to identify odor changes, color changes and/or the presence of solid waste debris. Himalayan personnel will be present during excavation activities and verify the presence of PCB contaminated soils and/or solid waste. Himalayan will assess the situation and provide Michels with specific directions for managing the PCB contaminated soils. Contaminated soils encountered within the vadose zone will be placed directly into lined truck beds and transported off-site immediately after excavation. Contaminated soils that are saturated will be allowed to dewater, prior to trucking off-site. Dewatering the excavations will consist of a stone sump installed below the base of the excavation and water storage/discharge will be managed in conjunction with the Groundwater Management Procedures in Section 2.5.

To protect existing land surfaces from contamination, Michels equipment operators will limit the placement of PCB contaminated soils outside of the truck beds and truck loading areas. Any PCB contaminated soil on the truck exterior will be removed and returned to the excavation, prior to trucking off-site. The soil directly underneath the loading pad areas will be considered 'Area B' soils and will be disposed of off-site at a licensed Special Waste landfill, as noted in KSingh's Soils Management Plan.

2.4 Soil Management - Off-Site Reuse, Recycling or Disposal

No hazardous PCB material will be transported off-site without authorization from Himalayan. It is anticipated that a significant portion of the excavated soils in Areas D through I, as shown on Figure 14, can be reused and will remain on-Site. Excavated soil from Target Areas 5, 5A, and 5B will be segregated and sent off-site for disposal, in accordance with EPA's policy for clean-up and disposal of bulk PCB remediation waste (40 CFR part 761). <https://www.epa.gov/pcbs/managing-remediation-waste-polychlorinated-biphenyls-pcbs-cleanups>

PCB contaminated soils disposed off-site will be transported under Material Shipping Record (MSR), Bill of Lading (BOL) or Uniform Hazardous Waste Manifest (UHWM), as deemed appropriate by Himalayan. BOL documentation will be prepared by Himalayan. The owner must sign the MSR, BOL and/or UHWM before these soils can be transported off-site. During all transportation of PCB contaminated soil, covers or liners will be used to prevent dust emissions. These temporary covers on trucks or other hauling equipment should be installed with care to minimize possibilities for the waste to come in contact with high winds during transport.

The limits and depths of excavation for soils designated as PCB hazardous material will be directed by Himalayan. Following the completion of excavation activities Himalayan will collect and composite soil samples from the base and sidewalls of each excavation, in accordance with Contract Document Section 02316, Part CONFIRMATORY SAMPLING for PCB analysis (Attachment B). At the request of the MMSD Project Engineer, additional analyses may be performed and/or the sampling frequency could be modified. Excavation of Target Areas 5, 5A, and 5B will be discontinued, when all confirmatory soil samples have PCB concentrations less than 50 mg/kg (ppm).

2.5 Groundwater Management Plan

It is anticipated that the maximum depth of excavation in Target Areas 5, 5A, and 5B will be twelve (12) feet below grade. Groundwater depths at the site vary seasonally and range from 3 to 12 feet bgs. Dewatering activities in these Target Areas, if necessary, will be coordinated with Himalayan and will be managed in conjunction with the Soil Management Procedures in Section 2.3.

If ground water is encountered, a stone sump will be installed below the base of the excavation. The water will be pumped from the excavation, thru a duplex filter with 50 micron bag filters and into a 21,000 gallon frac tank. If required, multiple stone sumps and pumps will be utilized to keep water level below the base of the excavation. The free space of the frac tank will be monitored and logged daily to record the volume of water pumped each day.

Himalayan will collect a water sample from each frac tank, prior to discharging to the MMSD sewer system. The water samples will be analyzed for PCBs, VOCs, RCRA Metals and PAHs. The contaminant levels will be compared to MMSD discharge permit requirements. If the levels are below MMSD discharge levels, water from the frac tank will be pumped with a trash pump and hose to the sewer catch basin located along N. 35th Street. If the water contaminant levels are above MMSD discharge levels, the water will be pre-treated to levels below MMSD discharge levels. Himalayan anticipates that water in the frac tank will be pre-treated thru a 25 micron filter bag, then thru a 4,000 pound carbon vessel and into another clean frac tank. Himalayan will conduct additional sampling to confirm that contaminant levels are below MMSD discharge levels. The pre-treated water will then be pumped to the sewer catch basin along N. 35th Street.

Michels will contact Mr. David Wozniak of MMSD, 48 hours prior to any discharge events. Weekly logs will also be submitted to MMSD on the volume of water discharged. Pre-treatment, discharge rates and

location, and analytical testing of influent / effluent requirements will be detailed in the terms of a Notice of Intent (NOI) that will be approved by MMSD.

Limitations

Himalayan did not conduct an extensive review and/or investigation of the site, per WDNR NR700 series regulations. This supplemental management plan is based on a limited review of select reports and does not include soil management plans for other areas of the above referenced site. Other soil management plans, over and above those stated in this plan are the responsibility of the site owner.

Himalayan greatly appreciated the opportunity to perform this work. If you have any questions please contact us at (262) 502-0066.

Regards,

HIMALAYAN CONSULTANTS, LLC



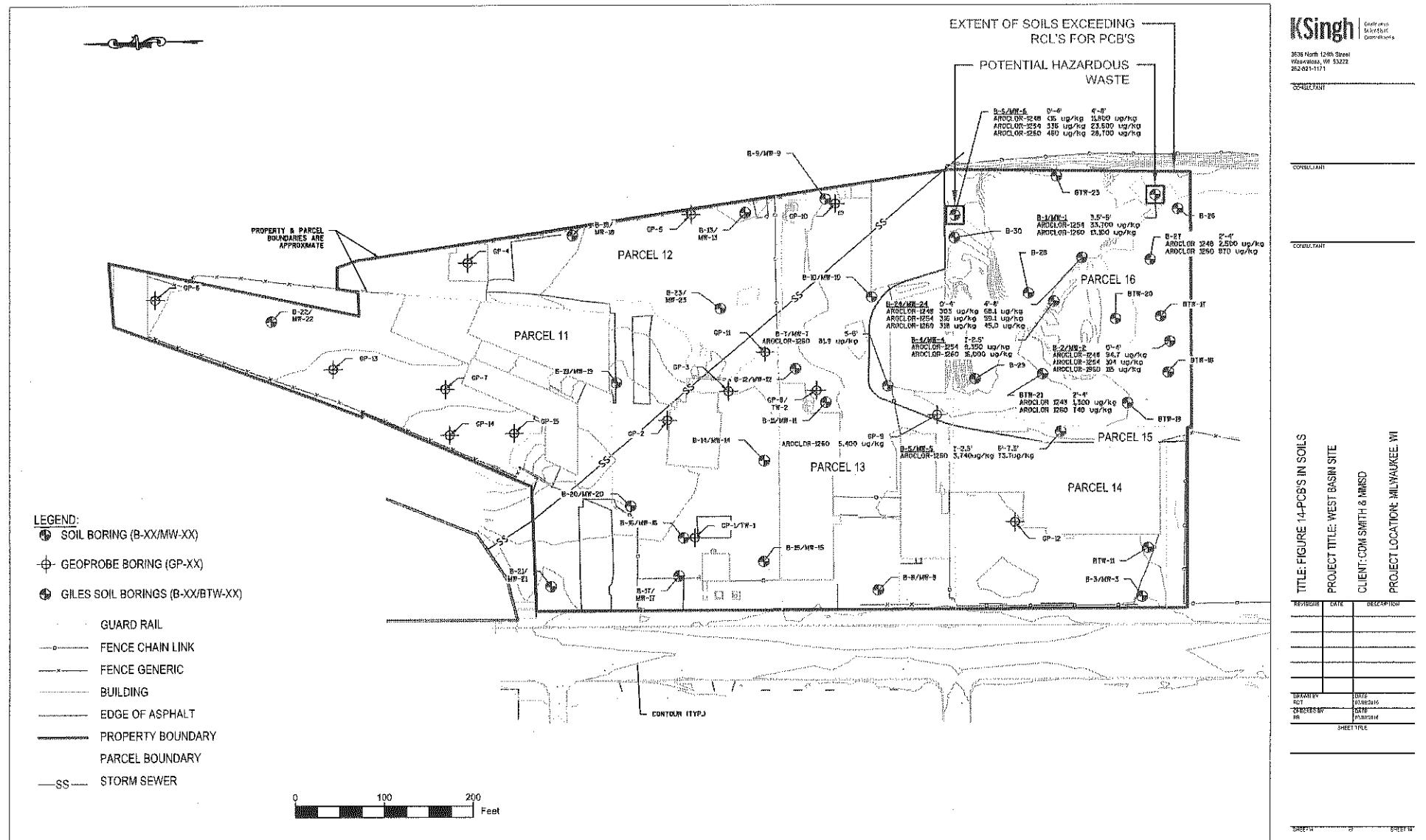
Thomas Dueppen, P.G.
Senior Hydrogeologist

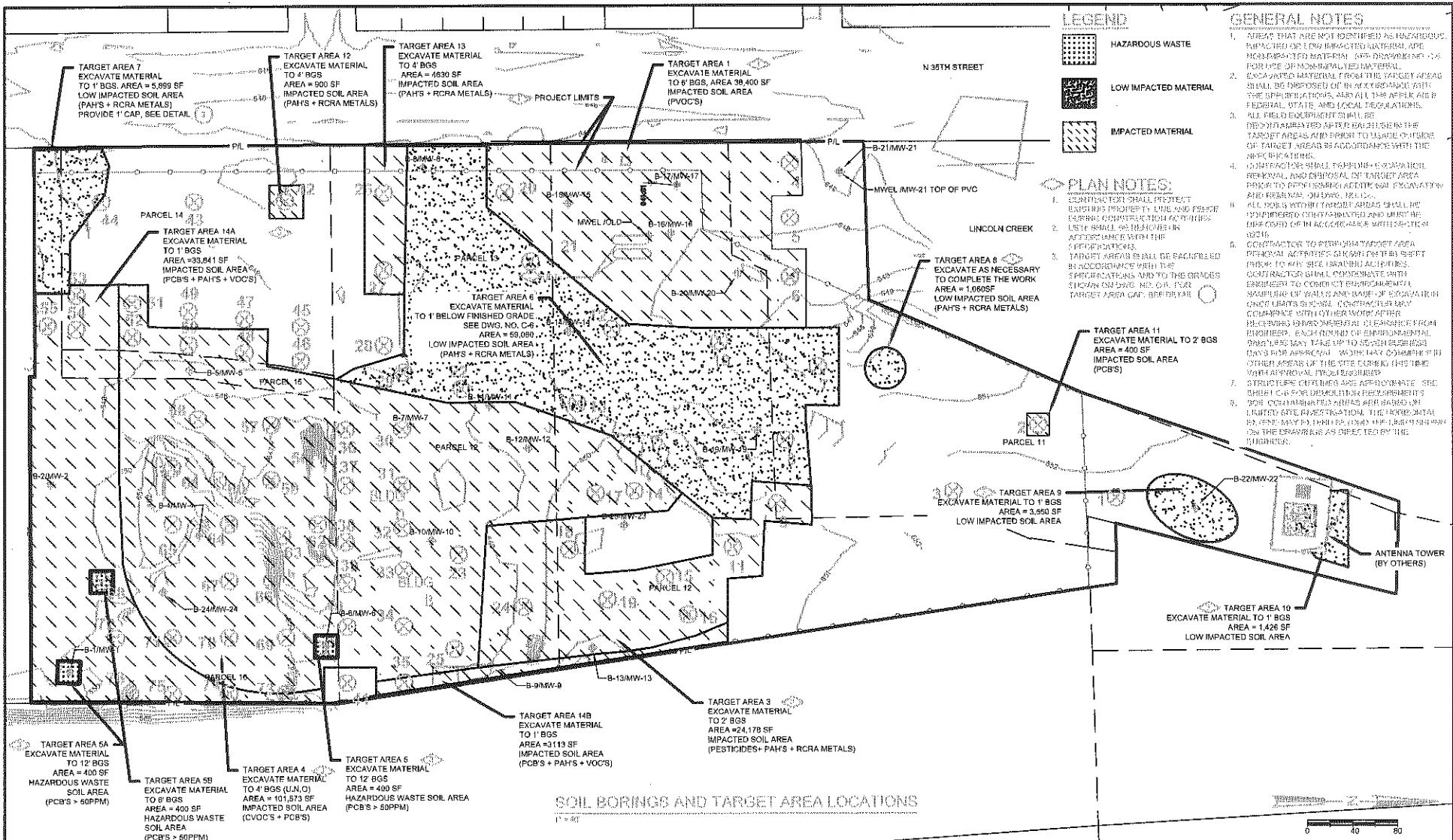
REFERENCES

1. K. Singh & Associates, Inc. (April 2016). Soils Management Plan / Interim Remedial Action Plan with Low Hazard Exemption Request, MMSD 30th Street Corridor Wet Weather Relief Project, West Basin (Parcels 11 to 16), Milwaukee, Wisconsin.

ATTACHMENT A Figure Maps

ATTACHMENT B Confirmatory Sampling





SOIL BORINGS AND TARGET AREA LOCATIONS

$\Gamma^* \rightarrow f_0(980)$

contents.

- Groundwater or soils of unnatural color.
- Spills or leaks of chemicals or petroleum products.
- Strong or unusual odors.
- Buried building materials that may contain asbestos containing materials (ACM).
- Other potential hazards.

If a suspected potentially hazardous material is discovered during construction activities, do not remove it from the site. Immediately stop all work in the immediate area of the potential hazard and leave the potentially hazardous materials in place. If the hazardous material appears to be leaking or otherwise spreading, contain or abate the spread of the material. Take all measures to prevent the release of the material to the environment and protect all on-site workers and the public from potential exposure.

During the course of substance containment or evacuation of site personnel, protect personnel (on- site workers, non-workers, or the general public) from contact with or exposure to the contaminated materials.

In the event that potentially hazardous materials are discovered, immediately notify the Owner and Engineer. It is the Owner's responsibility to notify Federal, State, and local regulatory authorities, if required. If hazardous waste other than PCB Waste is encountered, Contractor is required to meet responsibilities of all applicable federal and state hazardous waste regulations, including federal RCRA requirements.

Should an unanticipated incident occur that poses an imminent or substantial hazard in the opinion of the Contractor's qualified Safety Representative or the Engineer, work within the area influenced by the incident shall be suspended by the Contractor until the emergency situation has been brought under control, the incident has been evaluated, and the site conditions which contributed to the emergency have been mitigated.

In an emergency or imminent hazard situation, the health and safety of all personnel on-site are of prime concern. All personnel shall leave the area immediately until the Contractor's qualified Safety Representative can assess the situation and provide guidance as to how to secure the area and proceed with construction. The Contractor shall notify the Owner, Engineer and Owner's Environmental Consultant of any emergency or imminent hazard situation.

CONFIRMATORY SAMPLING (PC 05/16)

The Contractor and the Environmental Subconsultant shall conduct field Photoionization Detector (PID) screening or other laboratory methods for confirmatory sampling. The Contractor shall provide the necessary equipment and manpower to assist the Environmental Subconsultant in collecting soil samples at no additional cost to the Owner. If warranted by the results of field PID

screening, laboratory tests, visual or olfactory evidence, Engineer may also submit soil samples for laboratory analysis. Samples will be analyzed for VOCs, PVOCS, PCBs, and pesticides following SW-846 test methods. Minimum analyses – 118 VOCs, 48 PVOCS, 89 PCBs, and 15 pesticides. Contractor shall allow up to 10 days for laboratory analysis and reporting. The Contractor shall allow for up to a 10-day shutdown in the immediate Target Area following the completion of the excavation for the following:

1. Engineer obtains post excavation confirmatory samples.
2. Laboratory analysis time for post excavation confirmatory samples

Based on the results of the post excavation confirmatory samples, the Engineer may direct the Contractor to excavate and remove additional soils found to contain residual contamination, and beyond the limits of the Target Area as shown on the Plans. The process of Engineer collecting post excavation confirmatory samples, and Contractor continuing to excavate beyond the limits and depths of the Target Areas as shown on the Plans shall continue until the Engineer determines the Target Areas have been satisfactorily removed.

PCB confirmatory sampling shall be performed using the SW-846 Test Method 8082A for Polychlorinated Biphenyls (PCBs). After the PCB-impacted soil has been removed, confirmatory sampling of the remaining soil will be done in accordance with 40 CFR 761 Subpart O “Sampling to Verify Completing of Self-Implementing Cleanup.” The objective of confirmatory sampling is not to search for new contamination, but to verify completion of the cleanup. Each excavation zones will be separated into quadrants based on a 50-foot grid. A total of 9 samples will be collected and composited for one confirmatory sample in each quadrant. In addition to the base confirmatory samples, wall samples will be collected every 10 feet and eight samples will be composited to provide one confirmatory sample for each 80-foot section of the wall.

In the hazardous areas, a total of 7 confirmatory grab samples shall be collected at the following locations:

- Target Area 5 – 1 confirmatory sample from the base of the excavation.
- Target Area 5A – 1 confirmatory sample from the base of the excavation.
- Target Area 5B – 1 confirmatory sample from the base of the excavation, and one on each sidewall at a depth of 2 to 4-feet bgs.

D.



PARTNERS FOR A CLEANER ENVIRONMENT

June 2, 2016

Peter Ramanauskas
PCB Coordinator
USEPA Region 5
77 West Jackson Boulevard
Mail Code: LU-9J
Chicago, IL 60604-3507

Subject: Request for PCB Discharge Cleanup Site
Coordinated Approval in Wisconsin
Former Bee Bus Lines
MMSD 30th Street Corridor Wet Weather Relief Project
West Basin (Parcels 11 to 16), Milwaukee, Wisconsin
DNR BRRTS # 02-41-576602

Dear Mr. Ramanauskas:

The Milwaukee Metropolitan Sewerage District (District) is the owner real property in the City of Milwaukee located at 4320 North 35th Street. The District acquired the property from the Redevelopment Authority of the City of Milwaukee and it was previously owned by the Bee Bus Lines.

The site contains soils contaminated with PCBs at levels above 50 ppm. The District plans to remediate the site as part of its 30th Street Corridor Wet Weather Relief Project, under the supervision of the Wisconsin Department of Natural Resources (WDNR) and the One Cleanup Program Memorandum of Agreement.

Project Background

K. Singh & Associates, Inc. (K. Singh) was retained as part of a team with CDM Smith to perform an environmental investigation for the design of a stormwater detention basin as part of the District's West Basin (Parcels 11 to 16) 30th Street Corridor Wet Weather Relief Phase Project. The site is also known as the Former Bee Bus Lines site. The property is located in the northeast and southeast quarters of Section 1, Township 7 North, Range 21 East in the City of Milwaukee.

K. Singh previously performed a Phase I ESA for the six (6) parcels that make up this portion of the overall project. The parcels are numbered 11 through 16 and total 9.6 acres. The addresses for the Parcels are listed below:

Milwaukee Metropolitan Sewerage District

260 W. Seetho Street, Milwaukee, WI 53204-1446

414-272-5100 www.mmsd.com

- Parcel 11 – 4350 North 35th Street, Milwaukee, WI
- Parcel 12 – 4330 North 35th Street, Milwaukee, WI
- Parcel 13 – 4320 North 35th Street, Milwaukee, WI
- Parcel 14 – 4260-4300 North 35th Street, Milwaukee, WI
- Parcel 15 – 4260 North 35th Street, Milwaukee, WI
- Parcel 16 – 4250 North 35th Street, Milwaukee, WI

A Phase I Environmental Site Assessment (ESA) report was completed on September 8, 2014 which included a review of previous investigations, including a Phase II ESA performed by Giles on Parcels 14 and 16. The Giles Phase II ESA detected the presence of petroleum hydrocarbons including polynuclear aromatic hydrocarbons (PAHs) and petroleum volatile organic compounds (PVOCs), chlorinated hydrocarbons, Resource Conservation and Recovery Act (RCRA) metals, and polychlorinated biphenyls (PCBs). Based on K. Singh's data review, it was recommended that a Phase II ESA be performed due to recognized environmental conditions in the area. A limited Phase II ESA was performed.

The limited Phase II ESA investigation was initiated on April 11, 2014. A field program consisting of the performance of 15 geoprobe borings, to depths ranging from 3 to 20 feet below ground surface (bgs), and converting two of the geoprobe borings into temporary wells was performed by Kitson Environmental under the observation of K. Singh. One soil sample was collected from each geoprobe boring and tested for volatile organic compounds (VOCs), PAHs, RCRA metals, and PCBs. Groundwater was encountered at seven feet bgs and two groundwater samples were collected. The groundwater samples were tested for VOCs and PAHs.

Analytical testing of soil and groundwater samples indicated that Parcels 11, 12, 13, 15, and 16 are impacted by VOCs, PAHs, RCRA metals, and/or PCBs at concentrations greater than NR 720 Residual Contaminant Levels for Groundwater Protection and Direct Contact Protection in soils and NR 140 Enforcement Standards and Preventive Action Limits in groundwater. Due to the limited nature of the Phase II ESA, additional soil and groundwater investigation was recommended.

The current Phase II ESA was performed in accordance with the standards of ASTM E1903-11. The Phase II ESA investigation was initiated on January 8, 2016.

A field investigation program was designed to detect potential releases from past land uses. Between January 11 and January 14, 2016, twenty-four soil borings (B-1 to B-24) were performed within the boundary of the proposed West Basin. Also, twenty-four monitoring wells MW-1 to MW-24 were installed in boreholes B-1 to B-24, respectively.

Soil samples were tested for VOCs, PVOCs, PAHs, Resource Conservation and Recovery Act (RCRA) metals, PCBs, Pesticides, Herbicides, and Protocol B Special Waste Characterization parameters. Groundwater samples were tested for VOCs, PAHs, RCRA metals, and PCBs.

Between March 7 and 8, 2016, twenty soil borings (B-25 to B-26, B-28 to B-45) were performed within the boundary of the proposed West Basin. Gestra Engineering, Inc. performed the borings under the supervision of K. Singh. Soil samples were screened in the field using a photoionization detector (PID) in order to assess the area where contamination was most likely. Soil samples were sent to CT Laboratories using chain-of-custody procedure for analysis.

A supplemental groundwater sample was collected on March 15, 2016 by K. Singh. The groundwater sample was sent to CT Laboratories using chain-of-custody procedure for analysis.

The following analysis program was followed for the supplemental investigation:

- Seven soil samples were analyzed for VOCs in accordance with EPA Method 8260C.
- Twenty-seven soil samples were analyzed for PCBs in accordance with EPA Method 8082A.
- One groundwater sample was tested for Pesticides in accordance with EPA Method 8081B.

A total of 89 soil sample results from 59 soil borings are being used to characterize the soils at the West Basin site.

The following conclusions were drawn from the Phase II ESA and Supplemental Investigation in regards to PCBs:

- The source of contamination is historic operation of the properties as a railroad yard, historic operation of the properties as a scrap yard, historic operation of the Bee Bus Company on the property, historic operation of Integrated Mail on the property, leaking underground storage tanks (BRRTS #03-41-226492), and the presence of asphalt pavement.
- PCBs were detected in geoprobe boring GP-9 and soil borings B-1, B-2, B-4, B-5, B-6, B-7, B-24, BTW-21, and Giles B-27 at concentrations exceeding direct contact and/or groundwater protection RCLs. The soil sample from soil borings B-1 and B-6 contained PCBs at concentrations indicative of hazardous waste (greater than 50 mg/kg).
- As a result of the site investigation to date, an estimated 1,000 cubic yards of soil containing PCBs at concentrations greater than 50 mg/kg have been identified.

The results of the Phase II ESA, the Supplemental Investigation, and a Soils Management Plan were submitted to the WDNR on April 4, 2016. The Soils

Peter Ramanauskas

June 2, 2016

Page 4

Management Plan is requesting approval of an Interim Remedial Action in accordance with NR 708.11 (2) (b) and NR 718.

TSCA Coordinated Approval Request

Therefore, the District is requesting a TSCA Coordinated Approval, to be led by the WDNR in accordance with the One Cleanup Program Memorandum of Agreement between the USEPA and the WDNR.

Please call Jennifer Wright, MMSD Project Manager if you have any questions regarding this submittal at (414)225-2097 or jwright@mmsd.com.

The District's consultant for this project is:

K. Singh & Associates, Inc.
Attn: Mr. Robert Reineke, P.E.
3636 North 124th Street
Wauwatosa, WI 53222
(262) 821-1171, Ext 111
rreineke@ksinghengineering.com

The District's WDNR Project Manager is:

Mr. John Hnat, P.G.
Project Manager/Hydrogeologist
Remediation and Redevelopment Program
Southeast Region Headquarters
Wisconsin Department of Natural Resources
(414) 263-8644
John.Hnat@wisconsin.gov

Sincerely,



Michael J. Martin, P.E., BCEE
Director of Technical Services

c: Jennifer Wright/MMSD
Katherine Lazarski/MMSD
John Hnat/WDNR
Carl Johnson/CDM Smith
Robert Reineke/K. Singh

CERTIFICATION

Pursuant to 40 CFR §761.61(a)(3)(E), with respect to the remediation of PCB contaminated soils at on the former Bee Bus Line Properties located on North 35th Street in the City of Milwaukee; the Milwaukee Metropolitan Sewerage District will retain all sampling plans, sample collection procedures, sample preparation procedures, and instrumental/chemical analysis procedures used to assess or characterize the PCB contamination at the clean-up site on file at 260 West Seebot Street, Milwaukee, Wisconsin 53204.

Michael Martin, P.E., DEE
Director of Technical Services

MMA

Signature

6/21/16

Date

Milwaukee Metropolitan Sewerage District

260 W. Seebot Street, Milwaukee, WI 53204-1446

414-272-5100 www.mmsd.com 



LETTER OF TRANSMITTAL

260 West Seaboth Street
Milwaukee, WI 53204-1446

TO U.S. EPA, Region 5
ATTN John Nordine, CPG, LPG
RE Special Attachment 19

FROM Jennifer Wright, P.E.
Senior Project Manager
DATE June 21, 2016
CONTRACT NO. W11031C06

WE ARE SENDING YOU Attached Under separate cover via _____ the following items:
 Shop drawings Prints Plans Samples Specifications
 Copy of letter Change order

NO. OF COPIES	DESCRIPTION
1 CD	Special Attachment No. 19, Property Environmental Assessment Reports, Contract W11031C01

THESE ARE TRANSMITTED AS CHECKED BELOW:

- | | | |
|--|---|---|
| <input type="checkbox"/> For acceptance | <input type="checkbox"/> No exception taken, as submitted | <input type="checkbox"/> Resubmit _____ copies for approval |
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REMARKS If you have any questions, I can be reached at (414) 225-2097 or jwright@mmsd.com.

SIGNED /s/ Jennifer Wright, P.E.

If enclosures are not as noted, please notify us at once.

1. ORIGINAL TO RECORDS CENTER

March 28, 2016

Mr. Daniel Lau, P.E.
CDM Smith
330 East Kilbourn
Suite 1219
Milwaukee, WI 53202

Project # 4911

Subject: Draft Final Phase II Environmental Site Assessment for West Basin (Parcels 11 to 16), 30th Street Corridor Wet Weather Relief Project

Dear Mr. Lau:

Enclosed, please find a copy of the Draft Final Phase II Environmental Site Assessment Report, which K. Singh & Associates, Inc. (KSingh) has prepared for the referenced property. The assessment was conducted in accordance with the American Society for Testing and Materials Standard E-1903-11 for Phase II Environmental Site Assessments. This report has been modified based on comments received on March 9, 2016 and March 28, 2016.

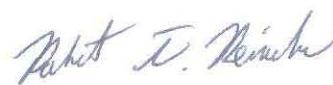
We appreciate the opportunity to provide environmental management services for the project. If we can be of further assistance in discussing this report with you, please contact us.

Sincerely,

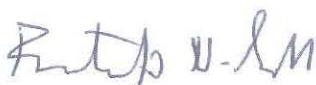
K. SINGH & ASSOCIATES, INC.



Riley Thoss, E.I.T.
Staff Engineer



Robert T. Reineke, P.E.
Senior Engineer



Pratap N. Singh, Ph.D. PE.
Principal Engineer

cc: Ms. Jennifer Wright, P.E. / Milwaukee Metropolitan Sewerage District

April 4, 2016

Mr. John Hnat, P.G.
Hydrogeologist
Remediation and Redevelopment Program
Wisconsin Department of Natural Resources
2300 North Martin Luther King Drive
Milwaukee WI, 53212

Project # 4911

Subject: Soils Management Plan / Interim Remedial Action Plan With
Low Hazard Exemption Request
MMSD 30th Street Corridor Wet Weather Relief Project
West Basin (Parcels 11 to 16), Milwaukee, Wisconsin
DNR BRRTS # 02-41-576619
DNR BRRTS # 02-41-576602
DNR BRRTS # 03-41-226492

Dear Mr. Hnat:

On behalf of the Milwaukee Metropolitan Sewerage District (MMSD), we are pleased to submit this Soils Management Plan / Interim Remedial Action Plan with Low Hazard Exemption Request for the referenced project.

MMSD is the Responsible Party and waste generator for this project. Contact information for the District is as follows:

Milwaukee Metropolitan Sewerage District
Attn: Ms. Jennifer Wright, P.E.
260 West Seaboth Street, Milwaukee, WI 53204
(414) 272-5100
jwright@mmsd.com

MMSD is proposing to construct a stormwater detention basin, known as the West Basin, on land identified as Parcels 11 to 16 adjacent to North 35th Street and Lincoln Creek. This proposed stormwater detention basin is part of MMSD's North 30th Street Corridor Wet Weather Relief Project. In the year 2016, MMSD is constructing two stormwater detention basins on the east side of the railroad corridor on North 30th Street.

The West Basin, located at Parcels 11 to 16 on North 35th Street, will start with a demolition project to remove superstructures. After the demolition project, the stormwater detention basin will be constructed in two phases. Phase 1 is proposed for construction in 2016, and this phase include site preparation activities: removal of concrete foundations, removal of pavement, removal of two underground storage tanks, and removal of identified hazardous waste and impacted soil materials. The property encompassing Parcels 11 to 16 is a former railroad yard, a former scrap yard, and former site of the Bee Bus Company. The property is the site of a closed leaking underground Storage Tank site (BRRTS #03-41-226492) that was closed with residual soil and groundwater contamination.

The completed Phase 1 Interim Basin will be constructed with berms at the perimeter so that the only water in the basin will be that which falls directly from precipitation. The surface of the interim basin will be No Mow Grass. There will be a drain from the low point in the basin to the existing CSO145 conduit. There will be a check valve to prevent flow from the CSO conduit from entering the basin in an extreme event.

The removal of identified hazardous waste and impacted material in Phase 1 is the subject of this Soil Management Plan/Interim Remedial Action Plan.

Phase 2 is planned to be designed in 5 years, and construction is tentatively planned for 2024. MMSD plans to acquire additional land adjacent to North 35th Street and south of Parcels 14, 15 and 16. Phase 2 will involve completion of the stormwater detention basin on Parcels 11 to 16 plus the additional land that is acquired on the south. The Phase 2 stormwater detention basin is planned to have a volume of 95 acre-feet.

During the design phase of Phase 2, MMSD plans to complete a Site Investigation and Remedial Action Options Report that will include Parcels 11 to 16, plus the additional land that is acquired to the south. The future Site Investigation Report and Remedial Action Options Report will assess sources of contamination, assess the remediation progress initiated in Phase 1 and identify additional remedial actions required for site closure.

Environmental investigations have identified the presence of chlorinated hydrocarbons, petroleum hydrocarbons, polynuclear aromatic hydrocarbons, RCRA metals, PCBs, and Pesticides in soil and/or groundwater at concentrations exceeding WDNR standards. Soils at the site, surrounding the area to be excavated and replaced, consist of stiff to hard silty clay soils. These clay soils exhibit extremely low permeability. Bedrock was encountered at approximately 12 feet below ground surface in Parcel 11 and the northwest portion of Parcel 12. Environmental work is proposed to be performed in stages leading to final closure of the site upon completion of the detention basin in approximately five years.

MMSD plans to excavate the following quantities of material to a depth of up to 12 feet as part of construction of an interim detention basin which is to be constructed in 2016:

- 1,000 cubic yards hazardous waste (Soils contaminated with PCBs > 50 mg/kg)
- 44,000 cubic yards special waste (Soils contaminated with PCBs < 50 mg/kg, chlorinated hydrocarbons, petroleum hydrocarbons, PAHs, Pesticides, and RCRA metals)
- 16,000 cubic yards of low hazard soils (contain PAHs which only exceed direct contact standards, Selenium less than 2 mg/kg, and Lead less than 50 mg/kg)
- 6,000 cubic yards of soils with no detected impacts

MMSD proposes to 1) dispose of the hazardous material at a hazardous waste landfill, 2) dispose of the special waste at a special waste landfill, and 3) reuse the low impact soils and soils without any detected impacts on site as part of construction of the West Basin. Work is proposed to be performed between July 1, 2016 and December 31, 2016.

Under Section 289.43(8) of the Wisconsin Administrative Code, MMSD is requesting a hazardous waste exemption for unlicensed disposal of specified solid waste from an individual generator on site as part of

interim remedial action. The proposed "low hazard" soils along with soils with no detected impacts are to be used as fill material for construction of the stormwater detention basin and surface water control berm. Details of the plan are included for your review.

The "low hazard" material warrants an exemption as the material does not present a significant risk to surrounding soils or groundwater and the material will be capped with an engineered cover, which will prevent direct contact exposure. The detention basin will also be fenced off from public access in the interim basis. Also, the project has significant positive social and environmental value to the area and disposing of the material as Special Waste would present a significant financial challenge to the project.

Therefore, we request that the WDNR approve the Soils Management Plan / Interim Remedial Action Plan with Low Hazard Exemption as requested for this project.

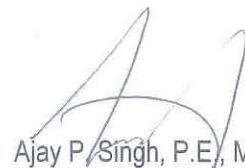
Please contact us if you have questions in regards to this submittal.

Sincerely,

K. SINGH & ASSOCIATES, INC.



Robert T. Reineke, P.E.
Senior Engineer



Ajay P. Singh, P.E., MPM
Vice President

DRAFT SOILS MANAGEMENT PLAN / INTERIM REMEDIAL ACTION PLAN

30th STREET CORRIDOR WET WEATHER RELIEF PROJECT
WEST BASIN (PARCELS 11 TO 16)
MILWAUKEE, WI

APRIL 4, 2016

PREPARED BY

K. SINGH & ASSOCIATES, INC.
ENGINEERS, SCIENTISTS, AND ENVIRONMENTAL CONSULTANTS
3636 N. 124TH STREET
WAUWATOSA, WISCONSIN 53222
(262) 821-1171
(262) 821-1174 FACSIMILE
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PREPARED FOR

MR. DANIEL LAU, P.E.
CDM SMITH INC.
330 EAST KILBOURN AVENUE, SUITE 1219
MILWAUKEE, WI 53202

&

MS. JENNIFER WRIGHT, P.E.
MILWAUKEE METROPOLITAN SEWERAGE DISTRICT
260 W. SEEBOOTH STREET
MILWAUKEE, WI 53204

PROJECT #4911

CERTIFICATION STATEMENT

"I, Robert T. Reineke, hereby certify that I am a licensed professional engineer in the State of Wisconsin in accordance with the requirements of ch. A-E 4, Wis. Adm. Code; that this document has been prepared in accordance with the Rules of Professional Conduct in ch. A-E 8, Wis. Adm. Code; and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 500 to 538, Wis. Adm. Code."


Signature

April 14, 2016
Date

Contact Information

Owner, Generator, and Reuse Site Contact:

Ms. Jennifer Wright, P.E.
Milwaukee Metropolitan Sewerage District
260 West Seboth Street, Milwaukee, WI 53204
(414) 272-5100
jwright@mmsd.com

Project Contact:

Mr. Robert Reineke, P.E.
K. Singh & Associates, Inc.
3636 North 124th Street, Wauwatosa, WI 53222
(262) 821-1171 ext 111
rreineke@ksaconsultants.com

Project Description

The Milwaukee Metropolitan Sewerage District (MMSD) retained CDM Smith to prepare a Stormwater Study of the 30th Street Corridor area in the wake of flooding in 2010. CDM Smith presented their findings in a report dated February 20, 2014. CDM Smith proposed and MMSD adopted the North 30th Street Corridor Wet Weather Relief Project as a solution to flood management in the area.

The North 30th Street Corridor Wet Weather Relief Project will be constructed in two phases. The East phase, located to the east of the railroad alignment between North 30th Street and North 35th Street, will begin construction in 2016, and includes construction of two storm water detention basins, storm water conveyance conduits, and site preparation for a third detention basin west of the railroad alignment.

The East phase will be constructed under two construction contracts. Contract 1 (MMSD Project Number W110300C01) will include site preparation for the two basins. Site preparation involves removal of contaminated soil in compliance with NR 718 and rough excavation. Contract 2 (MMSD Project Number W110300C02) will include completion of the storm water detention basins, the bio-filter in the East Basin, the conveyance conduits, diversion structures, green infrastructure along Roosevelt Drive, and landscaping, lighting and fencing. Contract 1 is scheduled to be completed in November 2016, and Contract 2 basins are scheduled to be completed in November 2017 with pipeline work extending into 2018.

The West Basin, located at Parcels 11 to 16 on North 35th Street, will start with a demolition project to remove superstructures. After the demolition project, the stormwater detention basin will be constructed in two phases. Phase 1 is proposed for construction in 2016, and this phase include site preparation activities: removal of concrete foundations, removal of pavement, removal of two underground storage tanks, and removal of identified hazardous waste and impacted soil materials. The property encompassing Parcels 11 to 16 is a former railroad yard, a former scrap yard, and former site of the Bee Bus Company. The property is the site of a closed leaking underground Storage Tank site (BRRTS #03-41-226492) that was closed with residual soil and groundwater contamination.

The removal of identified hazardous waste and impacted material in Phase 1 is the subject of this Soil Management Plan/Interim Remedial Action Plan.

Phase 2 is planned to be designed in 5 years, and construction is tentatively planned for 2024. MMSD plans to acquire additional land adjacent to North 35th Street and south of Parcels 14, 15 and 16. Phase 2 will involve completion of the stormwater detention basin on Parcels 11 to 16 plus the additional land that is acquired on the south. The Phase 2 stormwater detention basin is planned to have a volume of 95 acre-feet.

During the design phase of Phase 2, MMSD plans to complete a Site Investigation and Remedial Action Options Report that will include Parcels 11 to 16, plus the additional land that is acquired to the south. The future Site Investigation Report and Remedial Action Options Report will assess sources of contamination, assess the remediation progress initiated in Phase 1 and identify additional remedial actions required for site closure.

The East and West phase facilities will manage excess storm water flows during extreme precipitation events in an overall strategy to address storm water flooding and basement backups in the 30th Street Industrial Corridor. The proposed construction is the result of design efforts since late 2014 and planning completed by MMSD in early 2014. Aside from the primary storm water and combine sewer related objectives, the improvements are intended to assist with catalyzing economic development in the Corridor. Figure 1 shows the recommended facilities, which generally lie in the area between 35th Street and 27th Street, and between Lincoln Creek and Capitol Drive.

The overall project is designed to provide flood protection for the 1% Annual Event Probability storm, after the west phase is completed.

K. Singh & Associates, Inc. (KSingh) was retained as part of a team with CDM Smith to perform an environmental investigation for the design of a stormwater detention basin as part of the MMSD's West Basin (Parcels 11 to 16) 30th Street Corridor Wet Weather Relief Phase Project. The property is located in the northeast and southeast quarters of Section 1, Township 7 North, Range 21 East in the City of Milwaukee. The location of the project is shown on Figure 1.

KSingh previously performed a Phase I ESA for the six (6) parcels that make up this portion of the overall project. The parcels are numbered 11 through 16 and total 9.6 acres. Parcels 11 through 14 are owned by MMSD, Parcel 15 is owned by the Chicago Milwaukee Corporation, and Parcel 16 is owned by the Redevelopment Authority of the City of Milwaukee (RACM) but is on the agenda of the April 12, 2016 Common Council to be transferred to MMSD. The addresses for the Parcels are listed below:

- Parcel 11 – 4350 North 35th Street, Milwaukee, WI
- Parcel 12 – 4330 North 35th Street, Milwaukee, WI
- Parcel 13 – 4320 North 35th Street, Milwaukee, WI
- Parcel 14 – 4260-4300 North 35th Street, Milwaukee, WI
- Parcel 15 – 4260 North 35th Street, Milwaukee, WI
- Parcel 16 – 4250 North 35th Street, Milwaukee, WI

A Phase I Environmental Site Assessment (ESA) report was completed on September 8, 2014 which included a review of previous investigations, including a Phase II ESA performed by Giles on Parcels 14 and 16. The Giles Phase II ESA detected the presence of petroleum hydrocarbons including polynuclear aromatic hydrocarbons (PAHs) and petroleum volatile organic compounds (PVOCs), chlorinated hydrocarbons, Resource Conservation and Recovery Act (RCRA) metals, and polychlorinated biphenyls (PCBs). Applicable historic data from the Giles investigation for soil and groundwater is summarized in Tables 1 and 2, respectively. Based on KSingh's data review, it was recommended that a Phase II ESA be performed due to recognized environmental conditions in the area. A limited Phase II ESA was performed.

The limited Phase II ESA investigation was initiated on April 11, 2014. A field program consisting of the performance of 15 geoprobe borings, to depths ranging from 3 to 20 feet below ground surface (bgs), and converting two of the geoprobe borings into temporary wells was performed by Kitson Environmental under the observation of KSingh. One soil sample was collected from each geoprobe boring and tested for volatile organic compounds (VOCs), PAHs, RCRA metals, and PCBs. Groundwater was encountered at 7 feet bgs and two groundwater samples were collected. The groundwater samples were tested for VOCs and PAHs. Historic soil and groundwater data from KSingh's Phase II ESA is summarized in Table 3 and Table 4, respectively.

Analytical testing of soil and groundwater samples indicated that Parcels 11, 12, 13, 15, and 16 are impacted by VOCs, PAHs, RCRA metals, and/or PCBs at concentrations greater than NR 720 Residual Contaminant Levels for Groundwater Protection and Direct Contact Protection in soils and NR 140 Enforcement Standards and Preventive Action Limits in groundwater. Due to the limited nature of the Phase II ESA, additional soil and groundwater investigation was recommended.

The current Phase II ESA was performed in accordance with the standards of ASTM E1903-11. The Phase II ESA investigation was initiated on January 8, 2016.

West Basin Phase II Environmental Site Assessment and Results

A field investigation program was designed to detect potential releases from past land uses. Between January 11 and January 14, 2016, twenty-four soil borings (B-1 to B-24) were performed within the boundary of the proposed West Basin. Also, twenty-four monitoring wells MW-1 to MW-24 were installed in boreholes B-1 to B-24, respectively. The locations of soil borings and monitoring wells are shown on Figure 2.

Generalized descriptions of soil units are as follows.

- 1) The West Basin site is generally covered by asphalt, asphalt over concrete or topsoil over fill. Also, Parcel 16 includes a considerable amount of broken concrete piles. Asphalt is typically 4 to 12 inches thick. Fill depths range in depth from 3 feet to 10 feet below ground surface (bgs). The fill typically consists of silt and clay material along with steel, wood, glass and cream city brick. Standard Penetration Test results ranged from 5 to 50 blows/foot for the fill soils. No building foundations or construction debris was encountered in soil borings.
- 2) Silty clays underlie the pavement, topsoil, base course, and fill layers present on site. The clays are stiff to hard in consistency, brown to gray, and moist to wet. Standard Penetration Test results ranged from 4 to 28 blows/foot for the silty clay soils. Pocket penetrometer results ranged from 0.5 tons per

square foot (tsf) to 4.5+ tsf. Thin sand seams may be present. The clays were encountered down to 30 feet bgs.

- 3) Bedrock was encountered in seven (7) of the soil borings (B-16/MW-16 through B-22/MW-22) at depths ranging from 10 feet to greater 30 feet bgs. The bedrock appears to be shallower near Lincoln Creek, approximately 12 feet bgs in Parcels 11 and 12, and increases in depth to the south. Bedrock was not encountered within 5 feet of the proposed bottom of the basin in Parcels 13 to 16.

Soil samples were tested for VOCs, PVOCS, PAHs, Resource Conservation and Recovery Act (RCRA) metals, PCBs, Pesticides, Herbicides, and Protocol B Special Waste Characterization parameters. Groundwater samples were tested for VOCs, PAHs, RCRA metals, and PCBs.

Between March 7 and 8, 2016, twenty soil borings (B-25 to B-26, B-28 to B-45) were performed within the boundary of the proposed West Basin. Gestra Engineering, Inc. performed the borings under the supervision of KSingh. Soil samples were screened in the field using a photoionization detector (PID) in order to assess the area where contamination was most likely. Soil samples were sent to CT Laboratories using chain-of-custody procedure for analysis.

A supplemental groundwater sample was collected on March 15, 2016 by KSingh. The groundwater sample was sent to CT Laboratories using chain-of-custody procedure for analysis.

The following analysis program was followed for the supplemental investigation:

- Seven soil samples were analyzed for VOCs in accordance with EPA Method 8260C.
- Twenty-seven soil samples were analyzed for PCBs in accordance with EPA Method 8082A.
- One groundwater sample was tested for Pesticides in accordance with EPA Method 8081B.

Results of the current Phase II ESA and Supplemental Investigation for soils and groundwater are summarized in Tables 5 and 6, respectively. A copy of the Phase II ESA is included in Attachment A. A copy of a Technical Memorandum summarizing the Supplemental Investigation is included in Attachment B. A total of 89 soil sample results are being used to characterize the soils at the West Basin site.

The following conclusions were drawn from the Phase II ESA and Supplemental Investigation:

- The source of contamination is historic operation of the properties as a railroad yard, historic operation of the properties as a scrap yard, historic operation of the Bee Bus Company on the property, historic operation of Integrated Mail on the property, leaking underground storage tanks (BRRTS #03-41-226492), and the presence of asphalt pavement.
- Soil sampling test results detected the presence of chlorinated hydrocarbons in geoprobe boring GP-8 and in soil borings B-1, B-4, B-7, B-12, and B-24 at concentrations exceeding direct contact and/or groundwater protection RCLs. Tetrachloroethene (PCE), Trichloroethene (TCE), cis-1,2-Dichloroethene (DCE), were detected at concentrations exceeding RCLs. The extent of chlorinated hydrocarbons in soil is shown on Figure 3.

- Soil sampling test results detected the presence of petroleum hydrocarbons in geoprobe borings GP-1, GP-5, GP-8, GP-9, and GP-10 and in soil boring B-1, B-4, B-5, B-7, and B-16 at concentrations exceeding groundwater protection RCLs. Benzene, Methyl-Tert-Butyl-Ether (MTBE), and Naphthalene were detected at concentrations exceeding RCLs. No RCLs for petroleum hydrocarbons were exceeded below 16 feet. The extent of petroleum hydrocarbons in soil is shown on Figure 4.
- RCRA metals were detected in geoprobe borings, GP-1, GP-2, GP-3, GP-5, GP-10, and GP-11, and in soil borings B-1, B-2, B-3, B-4, B-5, B-6, B-11, B-13, B-15, B-20, B-22, B-24, BTW-17, BTW-20, BTW-21, and Giles B-28 at concentrations exceeding direct contact and/or groundwater protection RCLs. RCRA metals of concern include Arsenic, Barium, Cadmium, Lead, Selenium, and Mercury. Lead is present at concentrations greater than 100 mg/kg in soil borings B-1, B-4, B-5, B-6, and B-15. Subsequent testing was performed for Total Characteristic Leaching Protocol (TCLP) Lead on the samples with Total Lead greater than 100 mg/kg and all results were less than 5 mg/L which indicates that the soils are not characteristic hazardous waste for lead. The extent of RCRA metals in soil is shown on Figure 5.
- Soil sampling test results detected the presence of PAHs in geoprobe borings GP-2, GP-5, GP-6, GP-9, GP-10, GP-11, and GP-15 and in soil borings B-1, B-2, B-3, B-4, B-5, B-6, B-7, B-8, B-9, B-10, B-11, B-13, B-14, B-15, B-16, B-19, B-20, BTW-11, BTW-17, BTW-18, BTW-19, BTW-21, BTW-23, Giles B-26, and Giles B-27 at concentrations exceeding direct contact and/or groundwater protection Residual Contaminant Limits (RCLs). Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Chrysene, Dibenz(a,h)anthracene, Fluoranthene, Fluorene, Indeno[1,2,3-cd]pyrene, 1-Methylnaphthalene, and Naphthalene were detected at concentrations exceeding RCLs. No RCLs for PAHs were exceeded below 10 feet on Parcels 11, 13, 14, 15, and 16 and below 16 feet on Parcel 12. The extent of PAHs in soil is shown on Figure 6.
- PCBs were detected in geoprobe boring GP-9 and soil borings B-1, B-2, B-4, B-5, B-6, B-7, B-24, BTW-21, and Giles B-27 at concentrations exceeding direct contact and/or groundwater protection RCLs. The soil sample from soil boring B-6 contained PCBs at concentrations indicative of hazardous waste. No PCBs were detected below 10 feet bgs. The extent of PCBs in soil is estimated on Figure 7.
- Pesticides, consisting of Dieldrin and Endrin, were detected in soil borings B-1, B-5, B-6, and B-13 at concentrations exceeding direct contact RCLs. No Pesticides were detected at concentrations exceeding RCLs at depths greater than 10 feet. Pesticides are comingled with other contaminants.
- No Herbicides were detected in soils at concentrations exceeding direct contact or groundwater protection RCLs. No non-PAH SVOCs were detected in soils at concentrations exceeding direct contact or groundwater protection RCLs.
- Groundwater sampling test results detected the presence of the chlorinated hydrocarbons TCE, cis-1,2-DCE, and/or Vinyl Chloride in monitoring wells MW-4, MW-7, MW-11, MW-12, and MW-24 at concentrations exceeding NR 140 Enforcement Standards (ESs). A miscellaneous chlorinated hydrocarbon 1,1,2-Trichloroethane was detected in monitoring well MW-4 at a concentration exceeding the NR 140 Enforcement Standard. No other monitoring well contained a chlorinated

hydrocarbon exceeding NR 140 Preventive Action Limits (PALs) except for monitoring well MW-16. The extent of chlorinated hydrocarbons in groundwater is shown on Figure 8. Results were consistent with results from TW-2 collected during the previous Phase II ESA.

- Groundwater sampling test results detected the presence of the petroleum hydrocarbon Benzene in monitoring well MW-16 with a concentration of 29 ug/L exceeding the NR 140 ES of 5 ug/L. No other tested petroleum hydrocarbon parameter exceeded a NR 140 PAL, except for monitoring well MW-4, or NR 140 ES. A concentration contour map of benzene in groundwater is shown on Figure 9.
- Dissolved Arsenic was detected in monitoring well MW-20 at a concentration of 11.3 ug/L exceeding the NR 140 ES of 10 ug/L. Dissolved Arsenic was detected in monitoring wells MW-1, MW-2, MW-3, MW-5, MW-6, MW-7, MW-8, MW-11, MW-14, MW-17, and MW-24 at concentrations between the NR 140 PAL and the NR 140 ES. Dissolved Barium was detected in monitoring well MW-16 at a concentration between the NR 140 PAL and NR 140 ES. Dissolved Lead was detected in monitoring wells MW-6, MW-8, MW-13, MW-14, MW-15, MW-16, and MW-17 at concentrations between the NR 140 PAL and the NR 140 ES. Dissolved Selenium was detected in monitoring wells MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-8, MW-9, MW-10, MW-11, MW-12, MW-14, MW-20, MW-23, and MW-14 at concentrations between the NR 140 PAL and the NR 140 ES. An isoconcentration map of dissolved RCRA metals in groundwater is shown on Figure 10.
- Groundwater sampling test results detected the presence of the PAHs Benzo(a)pyrene, Benzo(b)fluoranthene, and/or Chrysene in monitoring wells MW-1, MW-6, MW-11, MW-14, MW-16, and MW-20 exceeding NR 140 ESs. In addition, the PAHs Benzo(a)pyrene, Benzo(b)fluoranthene, and/or Chrysene were detected between the NR 140 PAL and the NR 140 ES in monitoring wells MW-2, MW-4, MW-5, MW-7, MW-8, MW-13, and MW-16. No other tested PAH parameter exceeded a NR 140 PAL or NR 140 ES. A concentration contour map of PAHs in groundwater is shown on Figure 11. Results were consistent with results from TW-1 collected during the previous Phase II ESA.
- Groundwater sampling test results detected the presence of PCBs in monitoring well MW-6 exceeding the NR 140 ES. In addition, PCBs were detected between the NR 140 PAL and the NR 140 ES in monitoring well MW-1. No other tested PCBs parameter exceeded a NR 140 PAL or NR 140 ES. A concentration contour map of PCBs in groundwater is shown on Figure 12.

The locations of cross-sections are shown on Figure 13 and typical cross-sections showing the vertical extent of soil contamination are shown on Figures 14 and 15.

Generator Sites Locations and Legal Descriptions

The location of the West Basin is shown on Figure 1. The West Basin consists of Parcels 11 to 16. The locations of the parcels of the West Basin are described as follows.

Parcel 11 is located at 4350 North 35th Street, City of Milwaukee, Milwaukee County, Wisconsin. The parcel is more fully described as follows:

LANDS IN SE & NE 1/4 SEC 1-7-21 COM 50' E & 186.56' S OF NE COR OF SD SE
1/4 SEC-TH S 118.57'-TH E 100'-TH NE 33.54'-TH E 220.70'-TH NELY 173.73'- TH

NELY 56.10'-TH W 1'-TH NELY 76.18'-TH NELY 260.56'-TH W 71.06'-TH SWLY
298.75'-TH SWLY 206.35'-TH W 141.1

Tax Key No. 246-9898-110-1

The Property is approximately 2.28 acres and has commercial zoning.

Parcel 12 is located at 4330 North 35th Street, City of Milwaukee, Milwaukee County, Wisconsin. The subject property consists of one parcel more fully described as follows:

LANDS IN SE & NE 1/4 SEC 1-7-21 COM E LI N 35TH ST & 861.32' N OF S LI OF N
1/2 OF SD SE 1/4 SEC-TH N ALG SD ST LI 156.90'-TH E 100'-TH NELY 33.54'-TH E
220.70'-TH NELY 173.73'-TH NELY 56.10'-TH W 1'-TH NELY 76.18'-TH E 24.73'-TH
SELY 497.64'-TH W 466.08'

Tax Key No. 246-9896-111

The Property is approximately 2.12 acres and has commercial zoning.

Parcel 13 is located at 4320 North 35th Street, City of Milwaukee, Milwaukee County, Wisconsin. The subject property consists of one parcel more fully described as follows:

LANDS IN SE 1/4 SEC 1-7-21 COM E LI N 35TH ST & 666.50' N OF S LI OF N 1/2
OF SD 1/4 SEC-TH N ALG E LI N 35TH ST 194.82'-TH E AT RT ANGLES TO E LI N
35TH ST 466.08' TO A PT SD PT BEING 10.11' DUE W OF C L RR SPUR TRACK NO
1346-D-TH S 8DEG 37MIN E & 10' WL

Tax Key No. 246-9895-100-8

The Property is approximately 2.14 acres and has commercial zoning.

Parcel 14 is located at 4260-4300 North 35th Street, City of Milwaukee, Milwaukee County, Wisconsin. The subject property consists of one parcel more fully described as follows:

LANDS IN SE 1/4 SEC 1-7-21 COM ELY LI 35TH ST 430' N OF S LI SD 1/4 SEC-TH
NLY 237'-TH ELY 204' M/L TO PT 9.5' WLY OF AS MEAS AT RIGHT ANGLES TO
CENTER LI RR MOST WLY SPUR TRACK (NO. 13460)-TH CONT SLY PAR TO SD
TRACK TO LI DRAWN PERPENDICULAR TO ELY ST

Tax Key No. 246-9894-000

The Property is approximately 1.05 acres and has commercial zoning.

Parcel 15 is located at 4260 North 35th Street, City of Milwaukee, Milwaukee County, Wisconsin. The subject property consists of one parcel more fully described as follows:

LANDS IN SE 1/4 SEC 1-7-21 COM 666.50' N OF E-W 1/8 LI & 254' E OF W LI SD

1/4 SEC-TH E 21.26'-TH SWLY ALG A CUR 124.46'-TH S 115'-TH W 24.80' M/L -TH
NELY TO COM & SUBJ TO RR TRACK EASMT

Tax Key No. 246-9988-210

The Property is approximately 0.13 acres and has commercial zoning.

Parcel 16 is located at 4250 North 35th Street, City of Milwaukee, Milwaukee County, Wisconsin. The subject property consists of one parcel more fully described as follows:

CERTIFIED SURVEY MAP NO. 8327 IN SE1/4 OF SEC 1-7-21 LOT 1 BID #37

Tax Key No. 246-0441-000

Property is approximately 1.88 acres and has commercial zoning

The West Basin has been reported to the Wisconsin Department of Natural Resources and been assigned BRRTS # 02-41-576619 and 02-41-576602.

No detected impacts or low hazard excavated soils are proposed to be reused on Parcels 12, 13, 14, 15, and 16.

Proposed Interim Plan / Disposal Site Location And Characteristics

The West Basin is not planned for final completion until 2025. However, the West Basin is planned to be excavated to an interim condition in 2016 consisting of an approximately 4 foot deep area in Parcels 15 and 16 and an approximately 8 foot deep area in Parcels 12 and 13. A 7 foot thick layer of soil will be maintained over the combined sewer overflow which discharges into Lincoln Creek for structure stability in order to prevent floatation of the CSO conduit in a flooding condition. The combined sewer overflow is a structural impediment to soil and groundwater remediation. The plan for the interim detention pond configuration is shown on Figure 16.

Soil remediation activities are proposed to consist of the following, which is shown on Figure 17:

Area A: Soils containing chlorinated hydrocarbons, petroleum hydrocarbons, PCBs, PNAs, and high level RCRA metals. Sub-areas A.1 and A.2 contain PCBs at concentrations greater than 50 mg/kg.

Area A, is proposed to excavate contaminated soils to a depth of approximately 12 feet bgs. Sub-areas A.1 and A.2 will be disposed of as hazardous waste at a licensed hazardous waste landfill. The remainder of soils in Area A will be disposed of at a licensed Special Waste landfill such as Orchard Ridge Refuse Disposal Facility (RDF). Groundwater in the area of Area A is found between 2 and 6 feet bgs. The United States Environmental Protection Agency will be notified of the presence of PCBs at concentrations greater than 50 mg/kg. Excavation and disposal of contaminated soils from Area A will eliminate the risk the contaminated soils present to public health and the environment.

Area B: Soils containing petroleum hydrocarbons and high level RCRA metals. For Area B, it is proposed to excavate contaminated soils to a depth of up to 12 feet bgs. Soils in Area B will be disposed of at a licensed

Special Waste landfill such as Orchard Ridge RDF. Groundwater in the area of Area B is found between 7 and 9 feet bgs. Soils in this area have been previously investigated as part of BRRTS # 03-41-226492 and it was decided that long term natural attenuation was sufficient for soil and groundwater. However, as use of the site will change as part of a detention basin, the residual contamination will no longer be consistent with the future site use due to groundwater protection issues. Excavation and disposal of contaminated soils from Area B will eliminate the risk the contaminated soils present to public health and the environment.

Area C: Soils containing RCRA metals and Pesticides at concentrations exceeding groundwater protection and/or direct contact RCLs. Groundwater sampling has found no exceedances of NR 140 ESs in the area, although NR 140 PALs are exceeded. It is proposed to excavate the top 2 feet of soils in Area C, dispose of the excavated soils at a Special Waste landfill, and then cap the excavation with low impact soils (also known as low hazard contaminated soil), at least six inches of clean soil, and at least six inches of top soil. Area C will be maintained long term as a engineered barrier over residual contaminated soil. The engineered barrier will prevent direct contact risks and limit infiltration and groundwater contamination risks.

Area D: Low impact contaminated soil where Selenium was detected exceeding the groundwater protection RCL with a concentration of 1.4 mg/L at a depth of 4 to 6 feet bgs compared to the groundwater protection RCL of 0.26 mg/kg. Groundwater is greater than 12 feet bgs. Selenium meets all RCLs at a depth of 6 to 8 feet bgs and there is a separation distance of at least 5 feet between contaminated soil and the groundwater table. The area above Area D is proposed to be topped with gravel as part of an access road to a radio tower or with 12 inches of topsoil which will be maintained as a barrier to control infiltration of groundwater through grading.

Area E: Low impact contaminated soil where PAHs were detected exceeding direct contact protection RCLs. The area above Area D is proposed to be topped with gravel as part of an access road to a radio tower or with 12 inches of topsoil which will be maintained as a barrier to limit direct contact. The engineered barrier will directly protect against the direct contact pathway.

Area F: Low impact contaminated soil where Benzo(a)pyrene was detected exceeding direct contact protection RCL with a concentration of 18 ug/kg compared to the RCL of 15 ug/kg. The area above Area F is proposed to be topped with gravel as part of an access road to a radio tower which will be maintained as a barrier to limit direct contact. The engineered barrier will directly protect against the direct contact pathway.

Area G: Low impact contaminated soil where PAHs were detected exceeding direct contact protection RCLs. Soils will be excavated as part of construction of the detention basin with the soils reused on site as fill to bring the detention basin up to interim grade, covered by a minimum or six inches of clean fill and six inches of vegetated topsoil, or as part of a surface water control berm along the southern portion of the property which will be topped with six inches of vegetated topsoil. The cover system will be maintained and will prevent direct contact.

Area H: Soils where PAHs were detected exceeding direct contact protection RCLs and minimal RCRA metals are present above groundwater protection RCLs. In particular, Selenium was detected at a maximum concentration of 1.6 mg/kg in that area compared to the groundwater protection RCL of 0.26 mg/kg. Given that Selenium does not exceed the NR 140 ES we believe that Selenium represents a minimal long term risk to groundwater at the site and may be reused on site. Lead was detected at a concentration of 30.9 mg/kg in the area which is below the typical background concentration of 50 mg/kg. Soils will be excavated as part of construction of the detention basin with the soils reused on site as fill to bring the detention basin up to

interim grade, covered by a minimum or six inches of clean fill and six inches of vegetated topsoil, or as part of a surface water control berm along the southern portion of the property which will be topped with six inches of vegetated topsoil. The cover system will be maintained and will limit infiltration through grading.

Area I: Soils where PAHs were detected exceeding direct contact protection RCLs and minimal RCRA metals are present above groundwater protection RCLs. Soils will be excavated as part of construction of the detention basin with the soils reused on site as fill to bring the detention basin up to interim grade, covered by a minimum or six inches of clean fill and six inches of vegetated topsoil, or as part of a surface water control berm along the southern portion of the property which will be topped with six inches of vegetated topsoil. The cover system will be maintained as a barrier the will prevent direct contact and limit surface water infiltration through grading.

No areas where soils are to be placed are within 100 feet of a floodplain. There are no drinking water wells within 300 feet of the project. No soils will be placed in or near a wetland. The applicable portion of the Flood Insurance Rate Map for the area is included in Attachment C.

Additional Remedial Actions

Groundwater will be removed from excavations during construction. The excavations, which will extend 4 to 10 feet into the water table, is proposed to be discharged into MMSD's sewers under a Notice of Intent, with applicable pretreatment prior to discharge. Extended dewatering should improve groundwater quality.

Soils will be placed in the same depth ranges bgs. We are considering additional options such as the use of an oxygen releasing compound in order to enhance biodegradation of VOCs, if economically feasible.

Soils under buildings that are to be demolished adjacent to Area A will have samples collected at 30 foot spacing, at two foot depth intervals, to establish which soils need to be disposed of as Special Waste and which soils can be reused on site. Testing will be performed for PCBs, VOCs, PAHs, and RCRA metals. Soils containing PCBs, chlorinated hydrocarbons, petroleum hydrocarbons, PAHs, and RCRA metals other than Lead and Selenium at concentrations exceeding RCLs will be disposed of as Special Waste. A Quality Assurance Project Plan will be required to be submitted, approved, and followed to assure representative and quality data is acquired.

A fence will be placed around the interim detention basin. The fence will serve to prevent direct contact by the general public.

Groundwater monitoring wells will be replaced post-construction outside the interim detention basin. Groundwater sampling will be performed for VOCs, PAHs, PCBs, and dissolved RCRA metals on a semi-annual basis with annual reporting to the WDNR. Continued monitoring will assess if natural attenuation is occurring or whether further groundwater remedial actions need to be included in the final phase of construction.

An NR 716 investigation will be completed with a Site Investigation Report and Remedial Action Options Report which will consider the final construction of the West Basin and consider additional work to achieve final closure. The NR 716 investigation is scheduled for completion by 2022 following additional property acquisitions. Work performed to date will only be considered interim action in order to achieve early stormwater management goals and work towards a final basin that will extend onto the Integrated Mail

property to the south. The NR 716 investigation will include work on the Integrated Mail property which MMSD is currently in the process of acquiring. Piezometers may be installed, if necessary, for vertical delineation of groundwater contamination.

Work included in this Interim Remedial Plan may be supplemented as part of the plan for final closure of the site. As the site will be fenced preventing direct contact in addition to the engineered barriers and groundwater will be actively monitored, it is our opinion that the proposed interim condition will be protective of human health and the environment while also achieving additional social benefits in the present.

Comparative Justification

It is our opinion that reuse of the soils from areas G, H, and I is protective of groundwater for the following reasons:

- 1) The concentrations of PAHs in the contaminated soil that is proposed to be reused on-site are less than the groundwater protection RCLs.
- 2) The concentrations of Selenium that leach from the contaminated soil are less than the NR 140 Enforcement Standards based on Protocol B results and groundwater quality test results from monitoring wells at the site. No groundwater at the site exceeds the NR 140 Enforcement Standard for Selenium..
- 3) The concentrations of Lead in the contaminated soil that is proposed to be reused are less than WDNR background concentration and concentrations that leach from the waste are less than the NR 140 Enforcement Standards based on Protocol B results, TCLP Lead results, and groundwater quality test results from monitoring wells at the site. Specifically, TCLP Lead results from soil boring B-4 indicates soil with Lead concentrations many times greater than the Lead concentration of 50.9 mg/kg in soils we propose for reuse meet NR 140 Enforcement Standards based on leaching.

The PAHs in the proposed low impact soil represent a direct contact risk based upon RCLs. However, an engineered barrier combined with a fence will protect the public from direct contact risks.

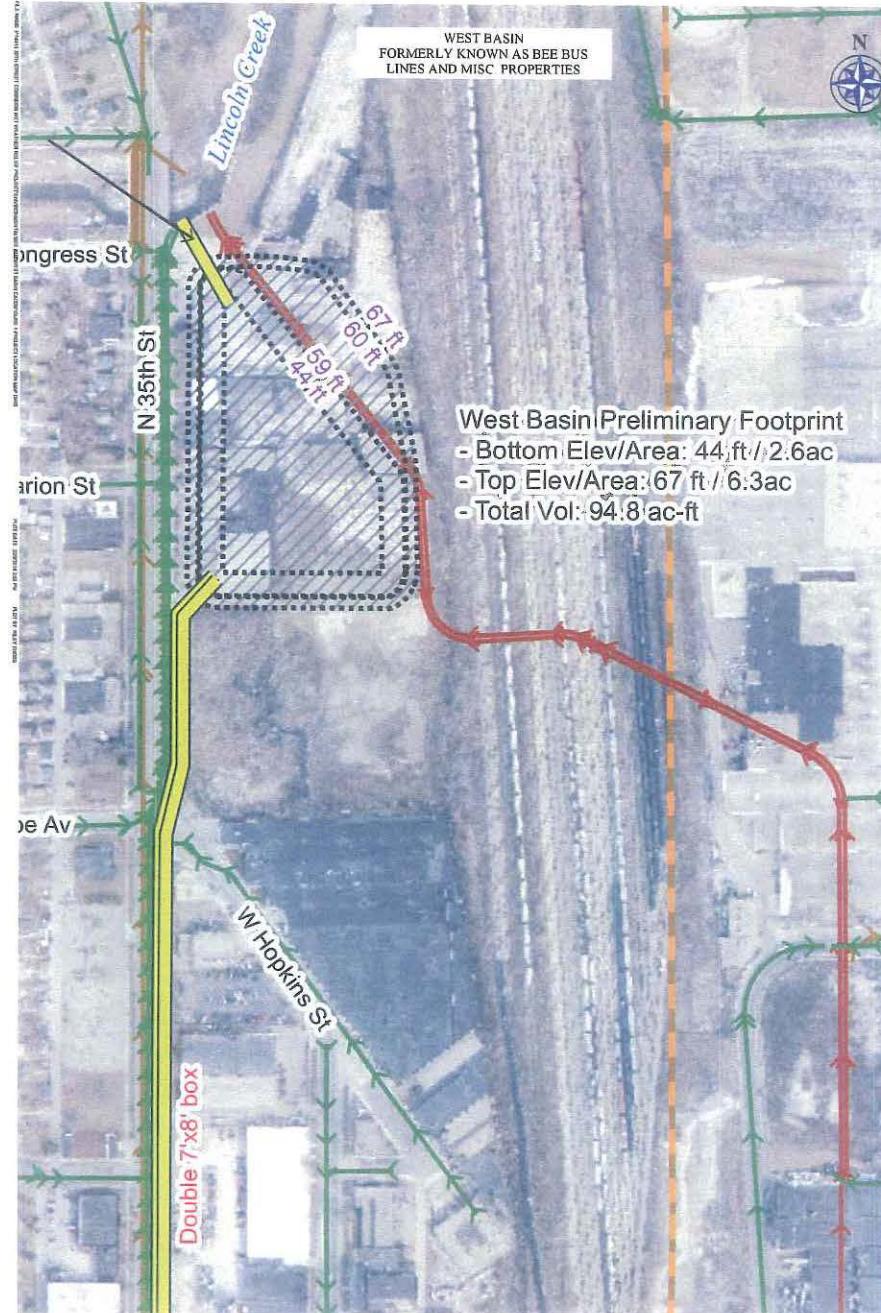
Environmental and Social Benefits

The 30th Street Wet Weather Relief Project will construct several initial components of an overall strategy to address stormwater flooding and basement backups and to serve as a catalyst for redevelopment in the 30th Street Industrial Corridor extending from the Menomonee River north to Lincoln Creek. Excavation of the West Basin is part of a set of stormwater improvements north of Capitol Drive to address major stormwater flooding problems on the northwest side of the City of Milwaukee. Upon completion, the proposed stormwater improvements in this area will provide the following benefits:

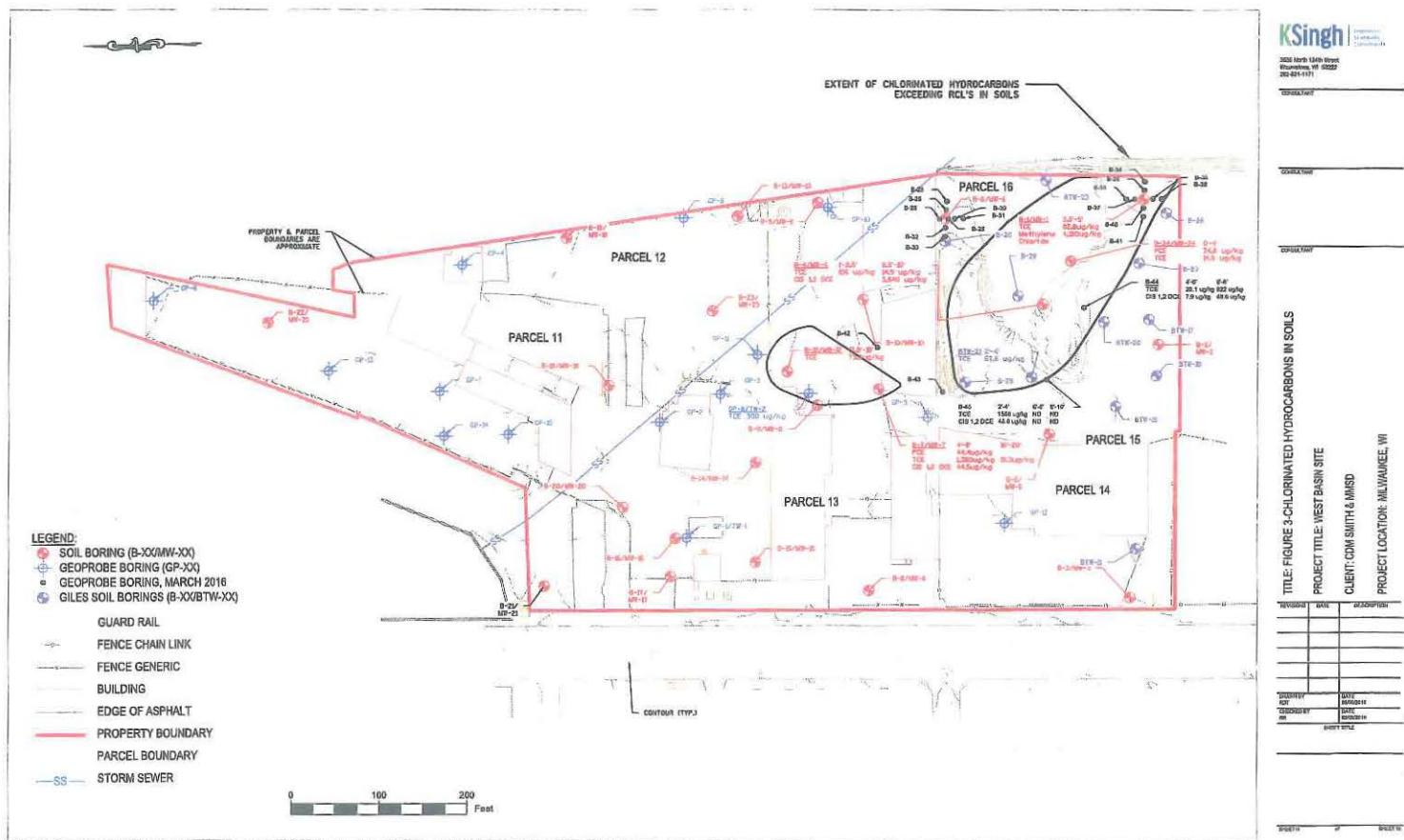
- One percent level of protection from flooding in the North Corridor area including reduced flooding damages that exceeded \$30 million from the July 2010 event
- Improved local sewer system performance and reduction in combined sewer overflows to Lincoln Creek
- Much needed open space/green space in an industrialized urban area

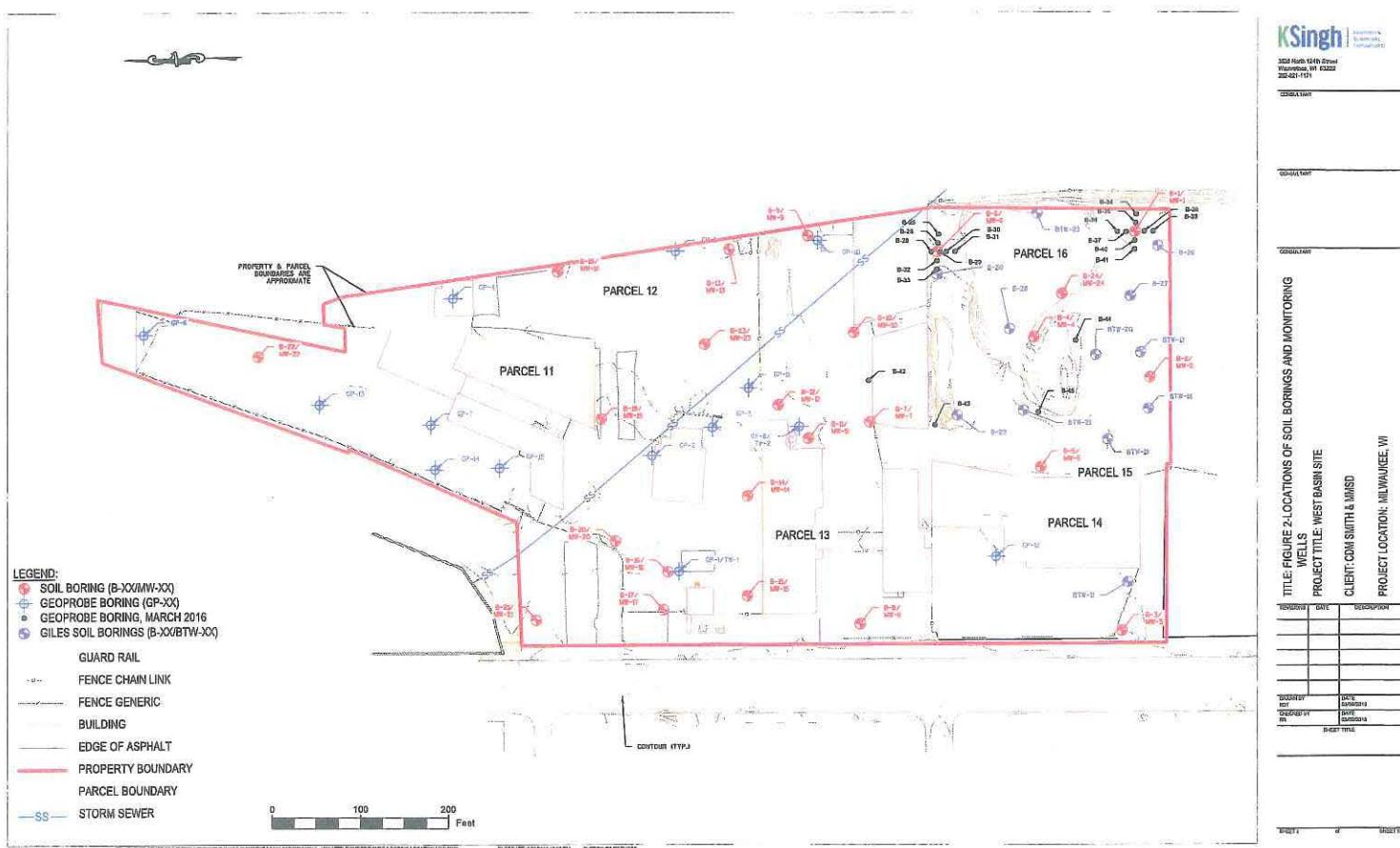
- Passive recreational opportunities through walking paths, overlook locations, and landscaping screening
- Educational signage
- Water quality improvements through bioswales on Roosevelt Avenue and a stormwater retention/biofilter concept in the West Basin
- Reduction in nuisance and street flooding in the vicinity including the Capitol Drive viaduct
- Walking trail adjacent to the West Basin along Lincoln Creek
- Open play field active recreational opportunities in West Basin at Parcel 14
- Restored native prairie/wet prairie land cover/habitat on portions of the basin
- Removal of vacant, nuisance properties in the neighborhood
- Removal of 44,000 cubic yards or more of contaminated soil and ultimate closure of BRRTs sites
- Asphalt and concrete will be recycled
- Investment in the local neighborhood and an improved overall quality of life for local residents

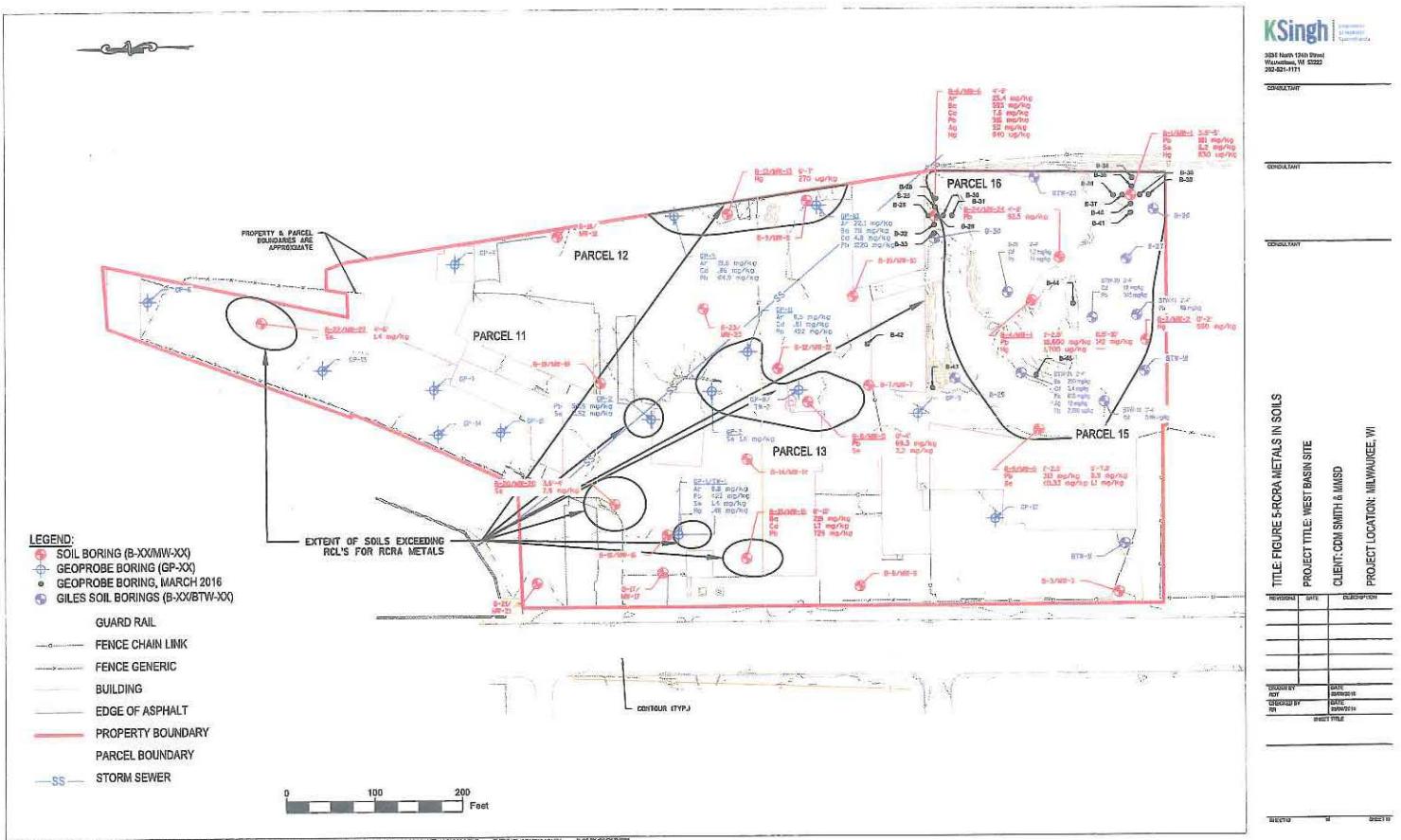
FIGURES

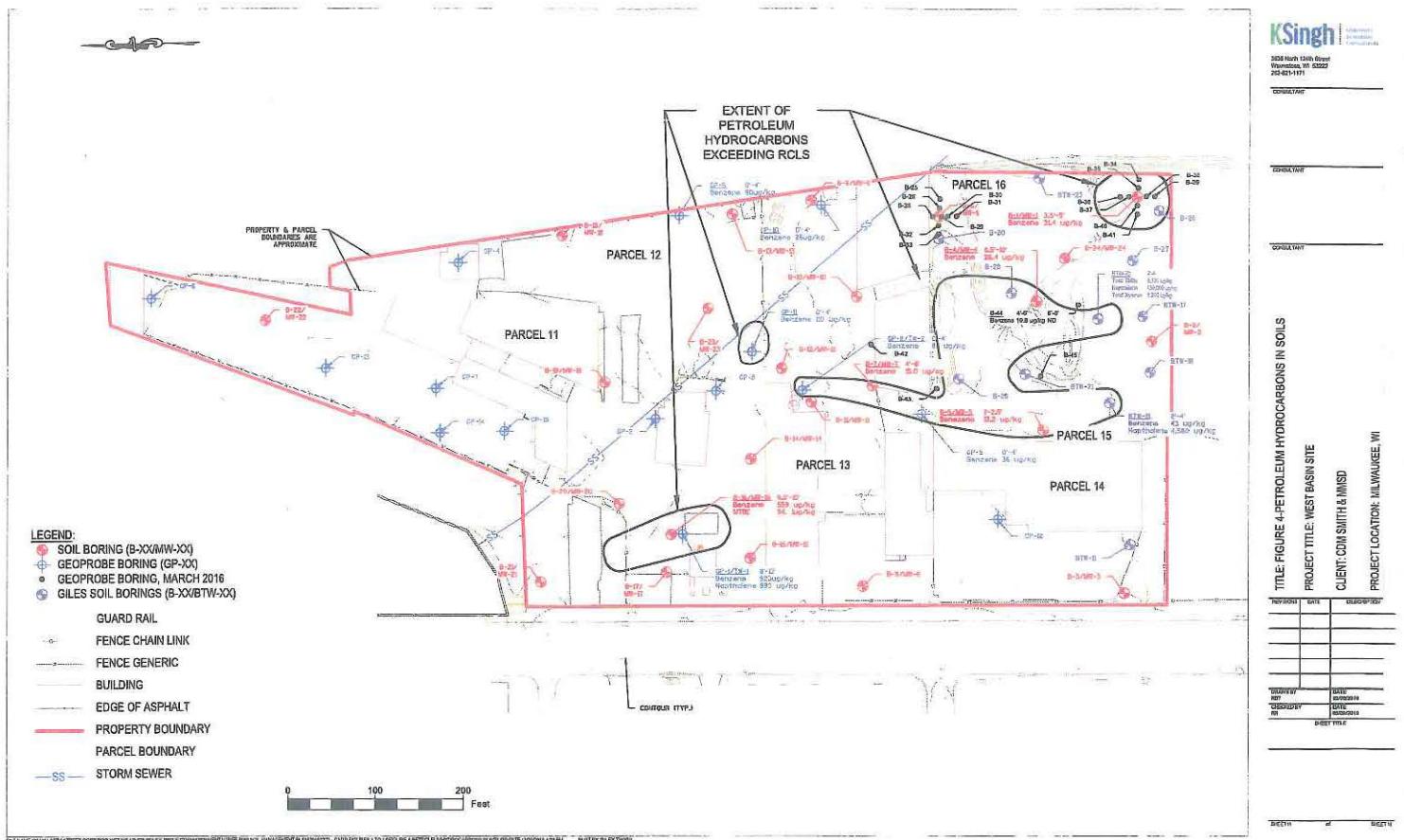


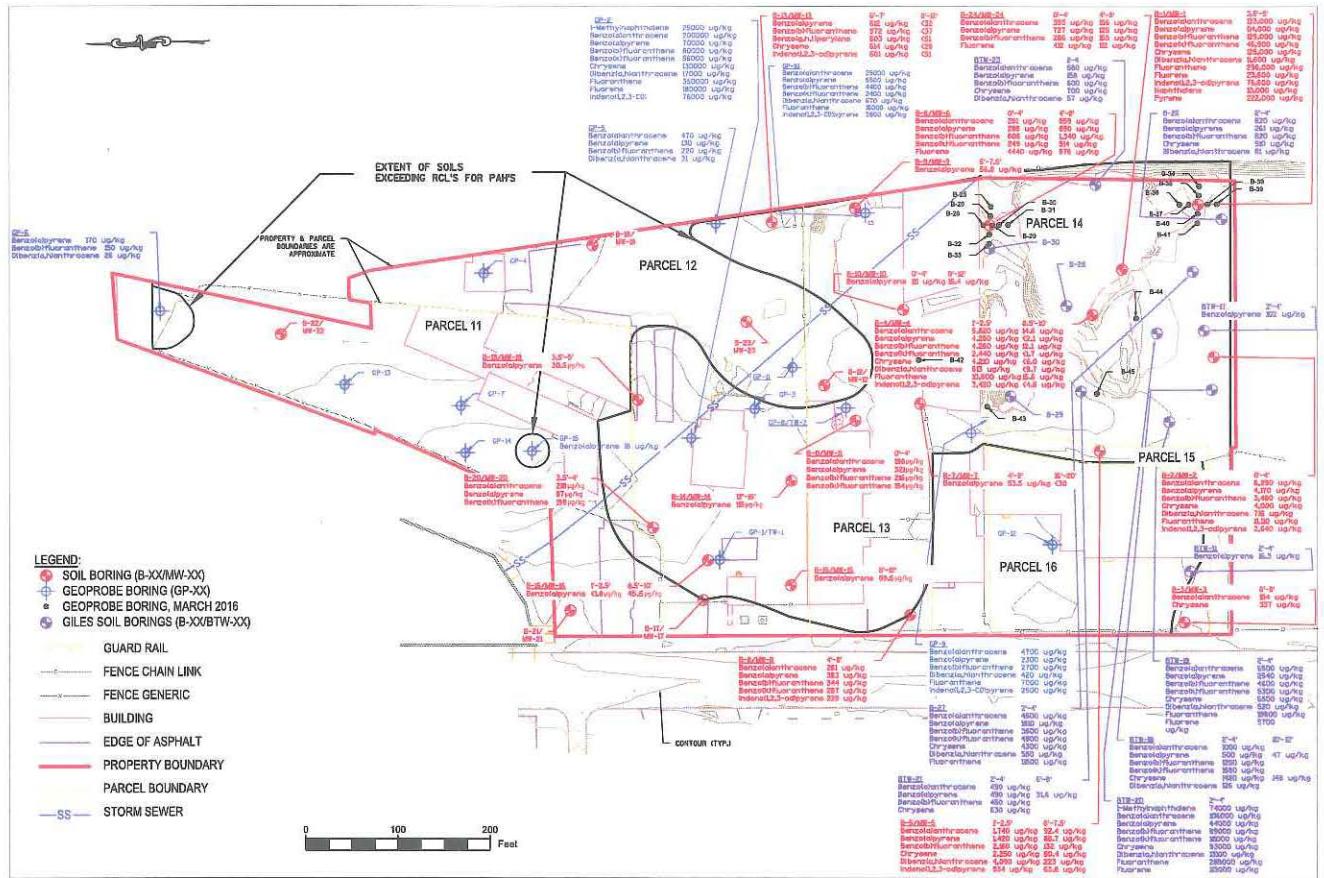
PROJECT LOCATION MAP
WEST BASIN SITE
H & MMSD
IN: MILWAUKEE, WI











KSingh | CONSULTANT
EDUCATOR
SPEAKER

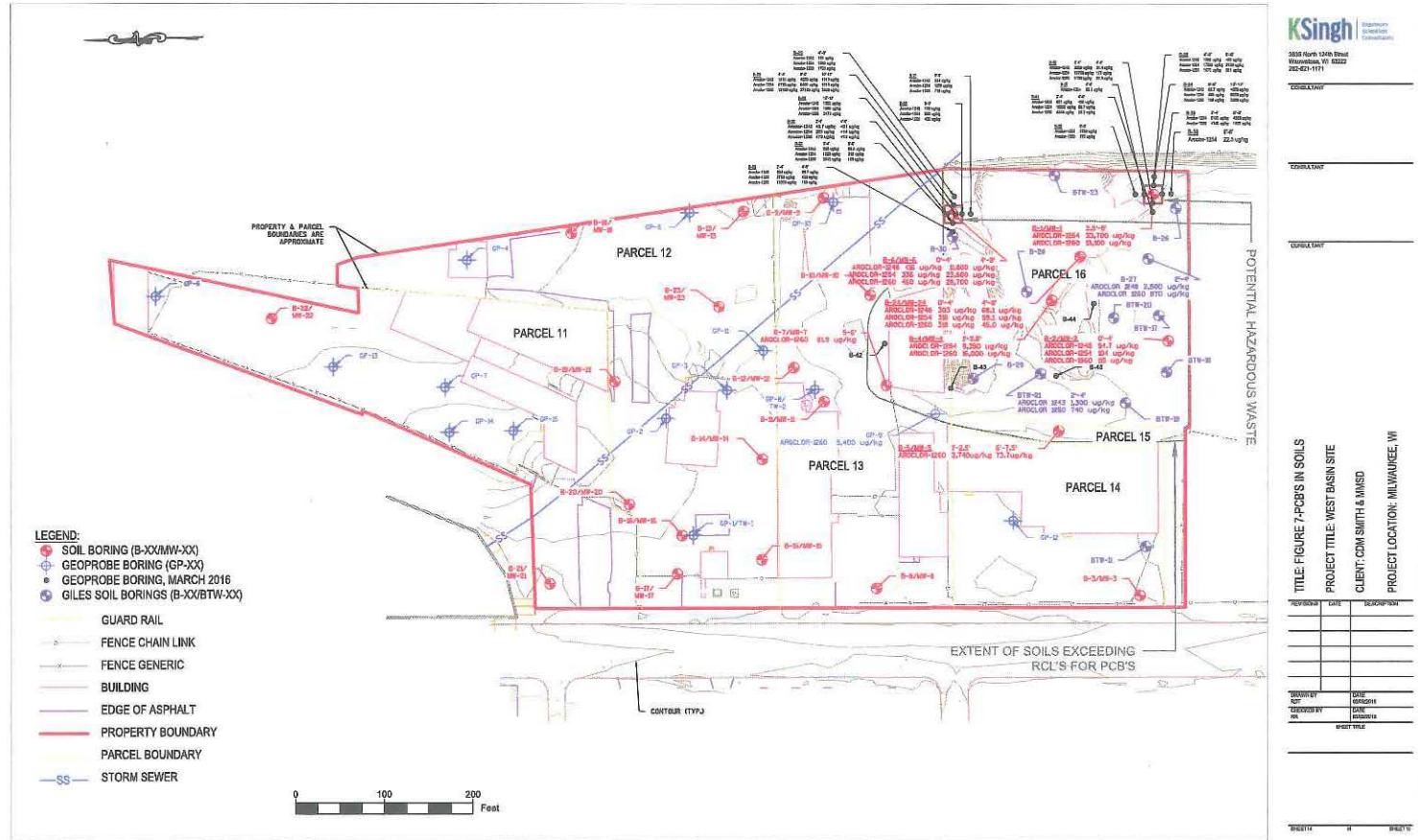
[View Details](#)

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IN S

TITLE: FIGURE 6-PAH'S		PROJECT TITLE: WEST BAY	
		CLIENT: CDM SMITH & WILSON	
		PROJECT LOCATION: MILWAUKEE	
REVISIONS	DATE	DESIGN BY DATE	
DRAWN BY ACT		DATE REVISIONS	
SPECIFIED BY APR		DATE REVISIONS	
SHEET 11 OF 12			



KSingh Environmental Services Corporation
5000 North 12th Street
Milwaukee, WI 53205
262-671-1171

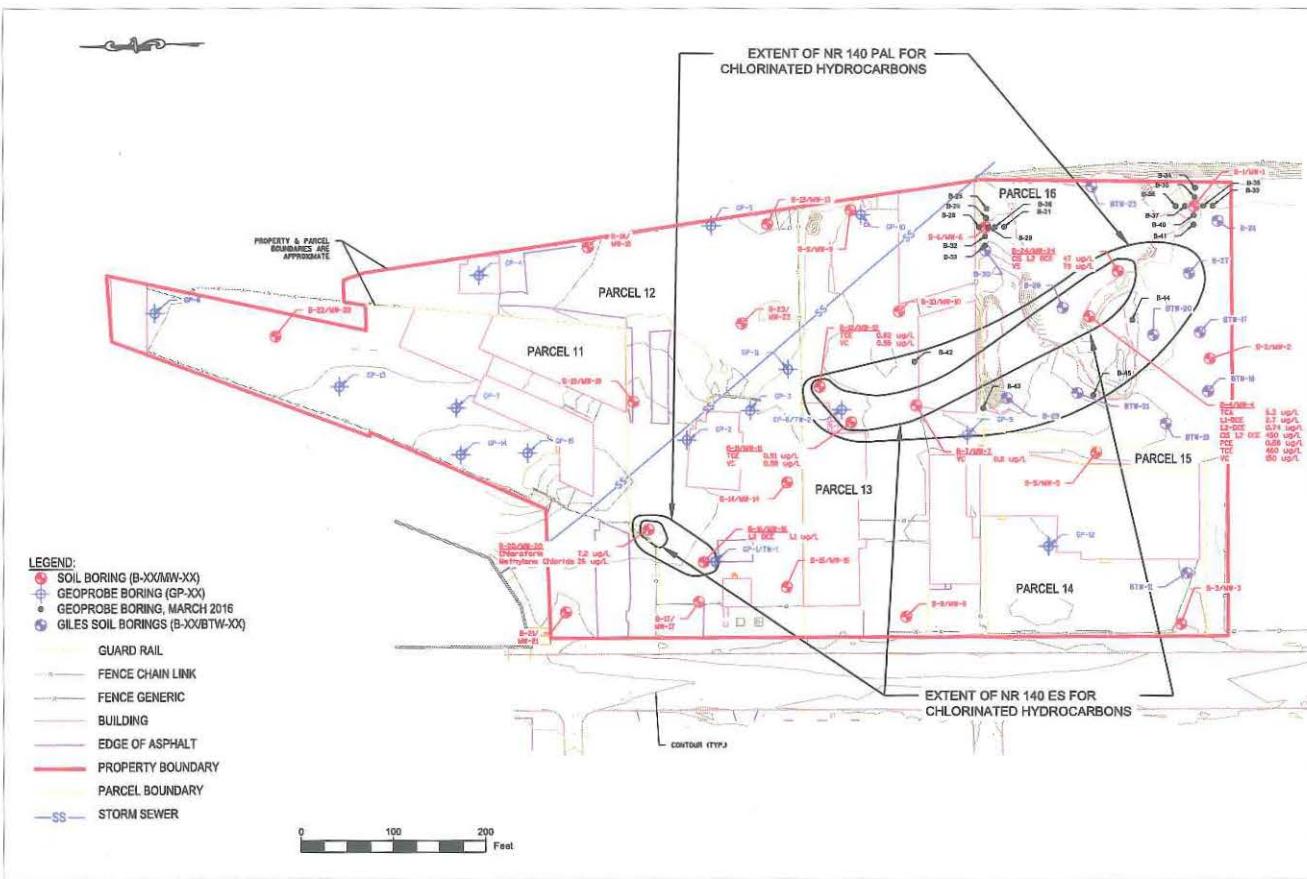
GENERAL

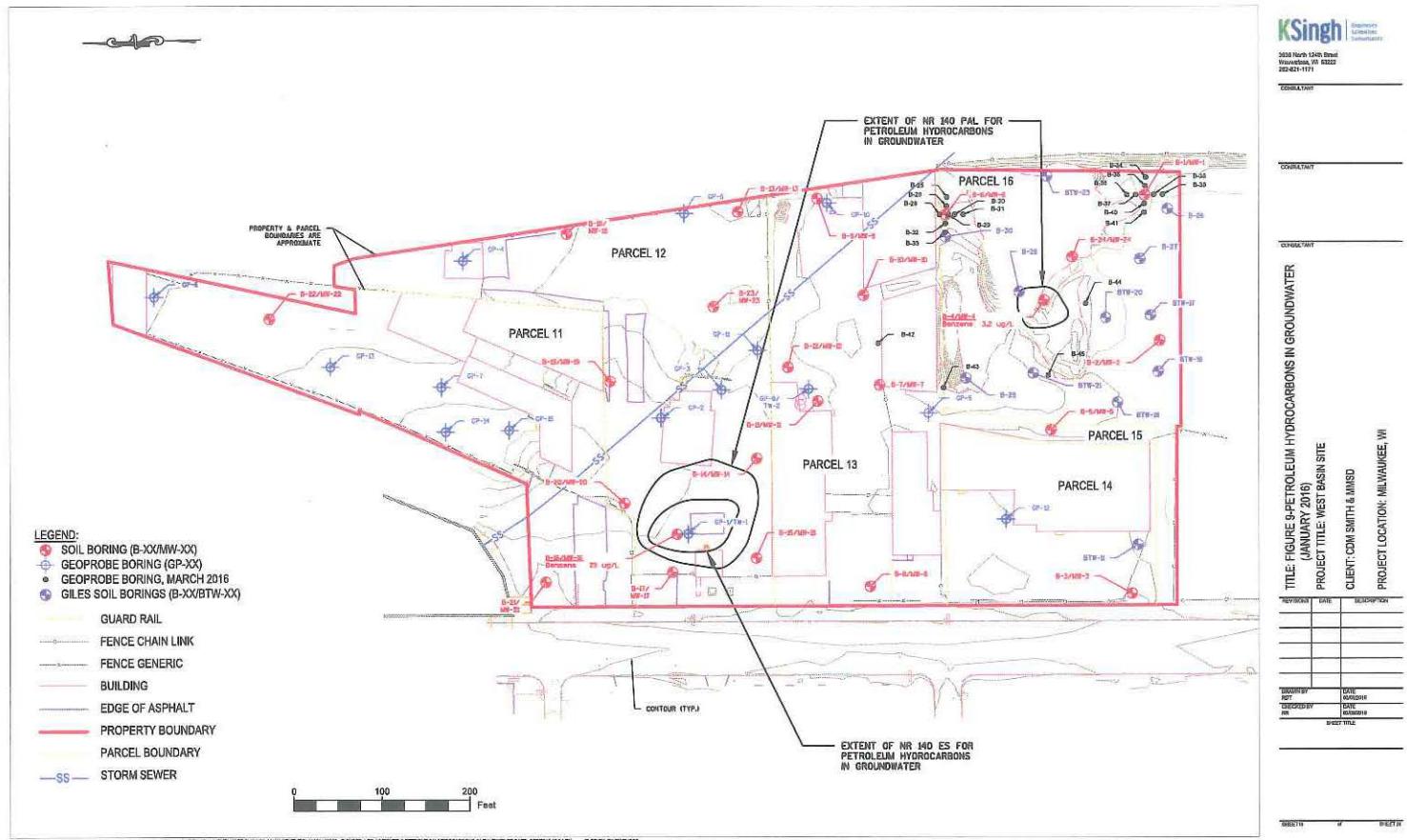
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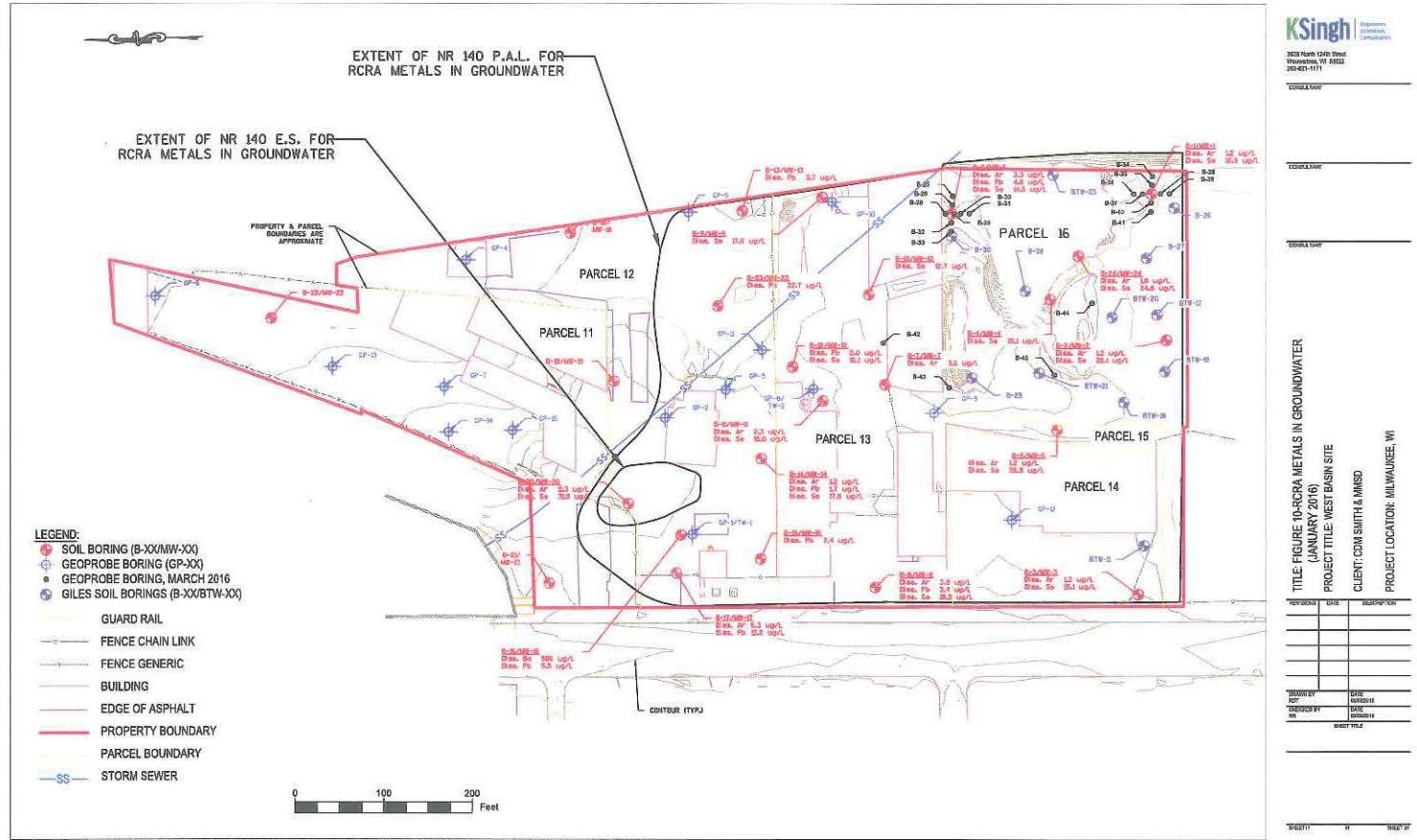
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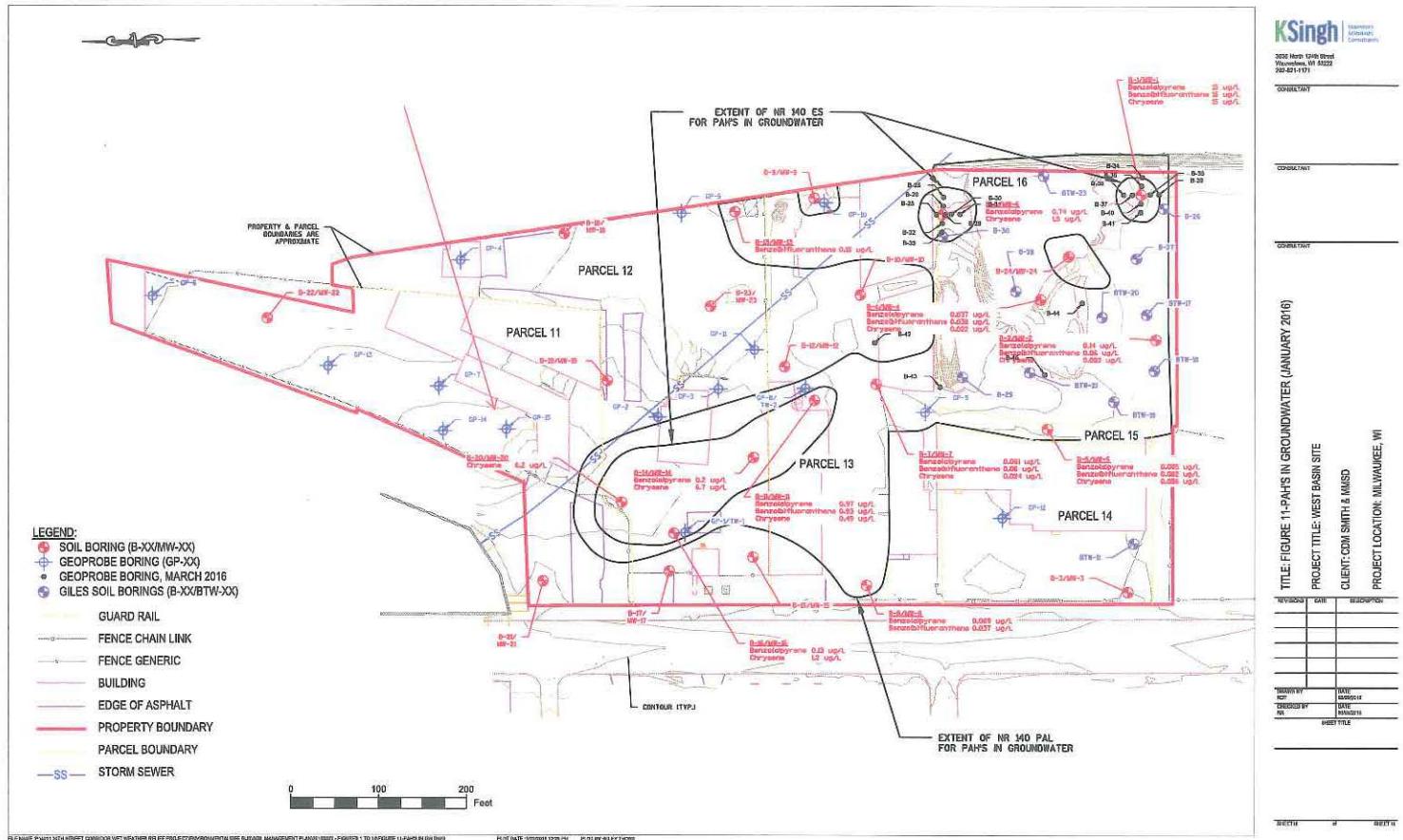
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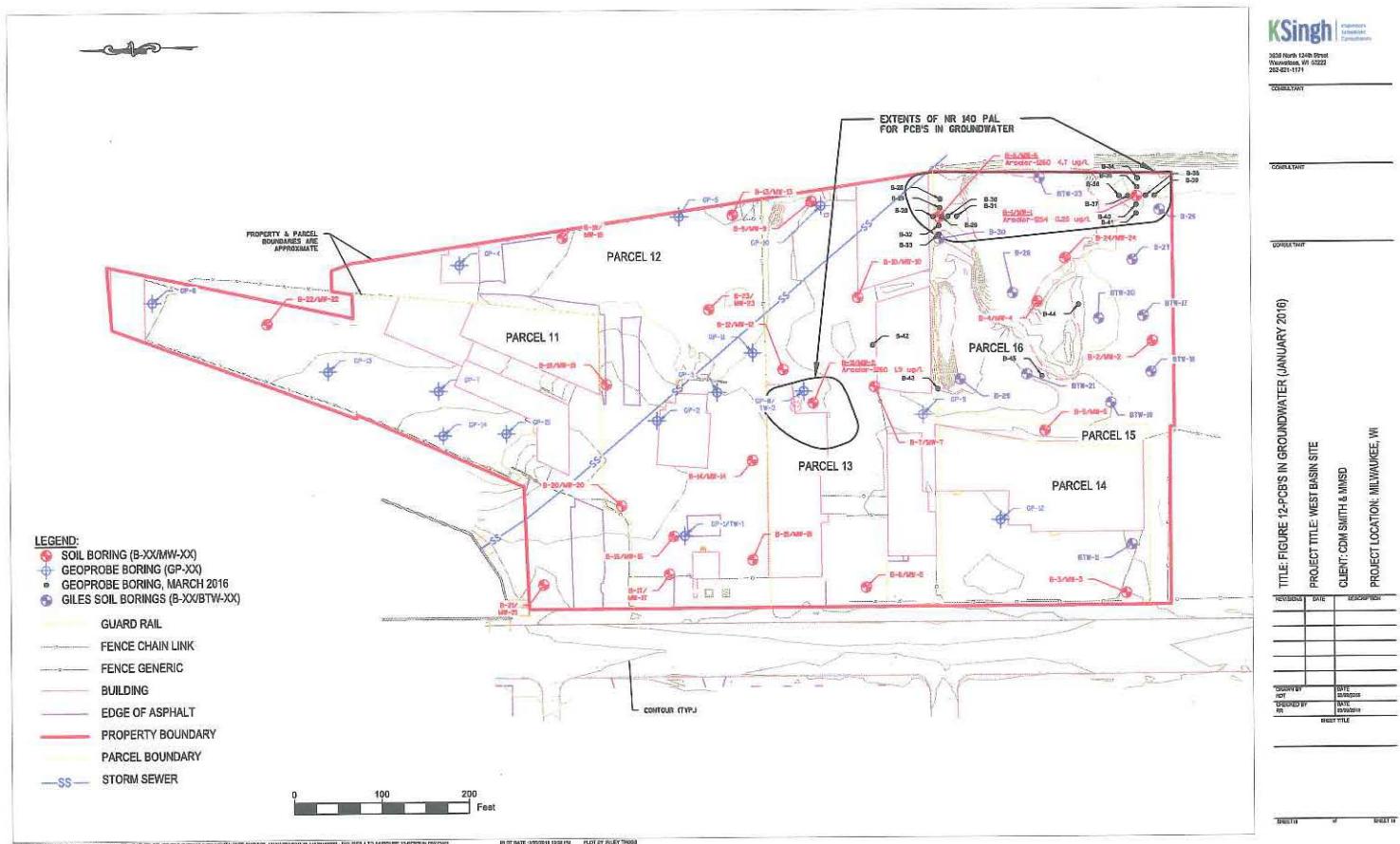
TITLE FIGURE 8-CHLORINATED HYDROCARBONS IN GROUNDWATER
(JANUARY 2016)
PROJECT SITE: WEST BASIN SITE
CLIENT: CDM SMITH & MWH
PROJECT LOCATION: MILWAUKEE, WI











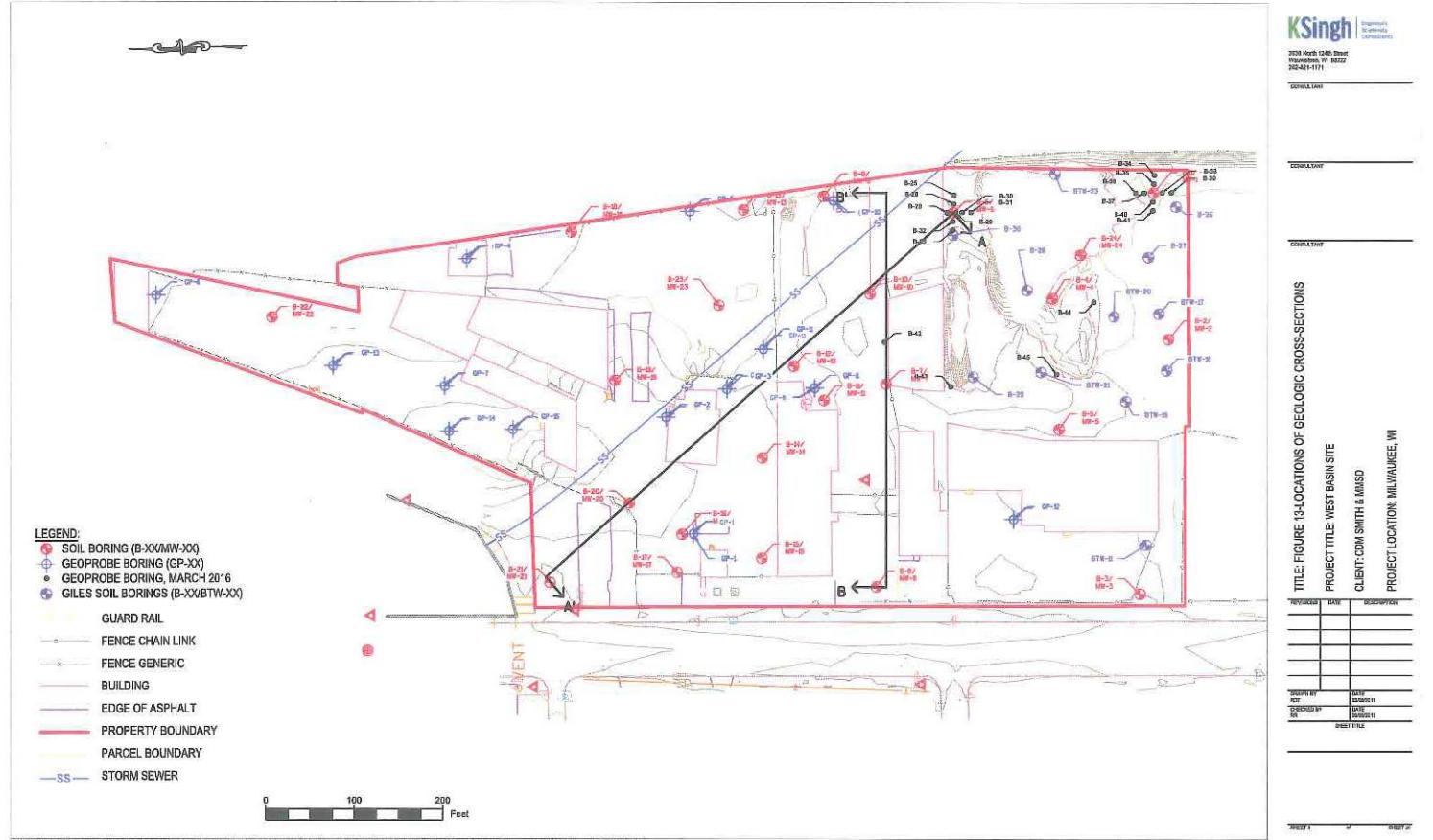


Figure 14 Cross-Section A-A'

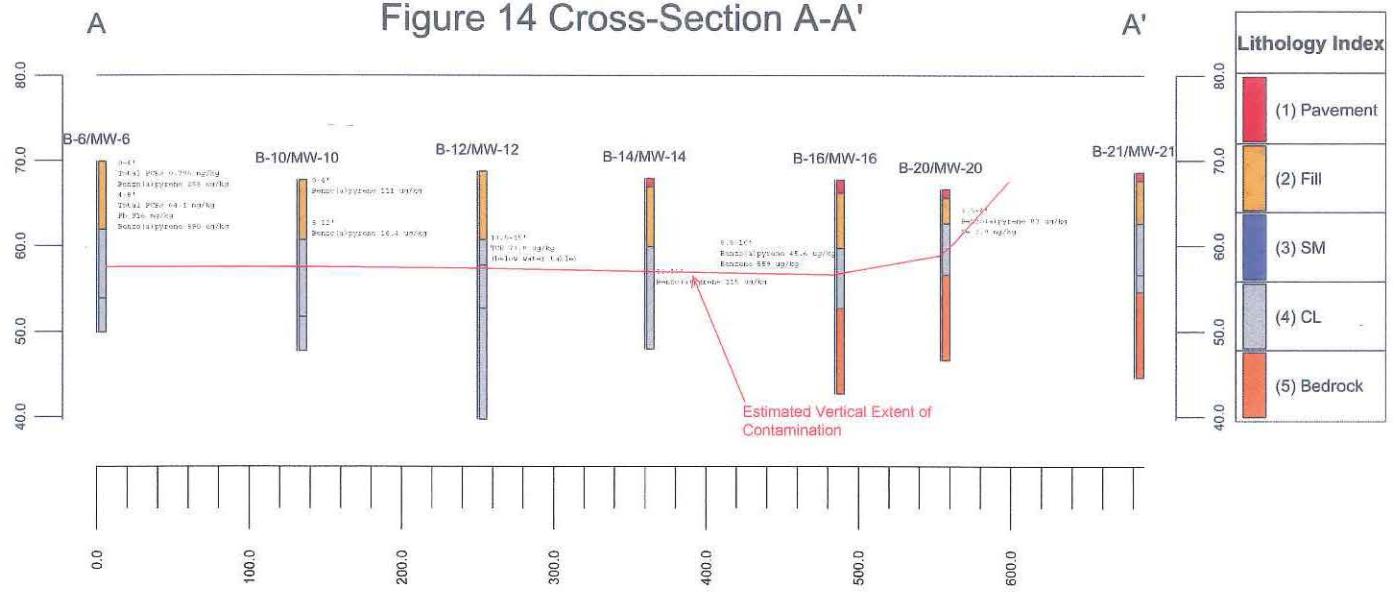
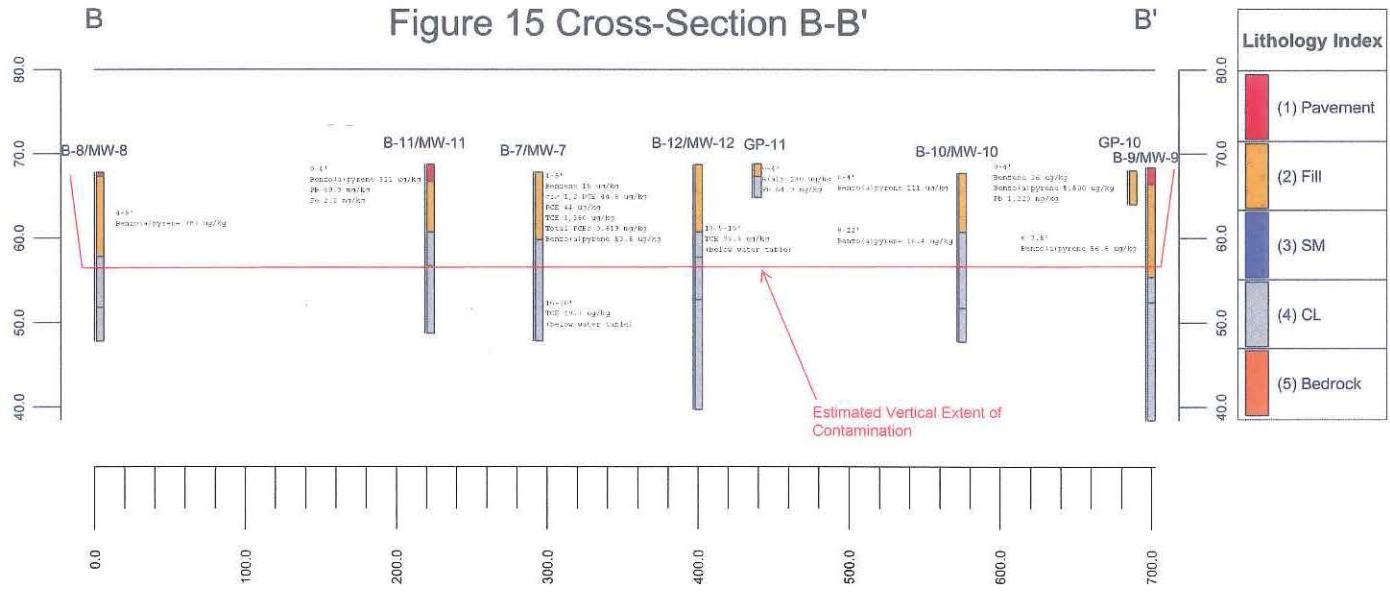
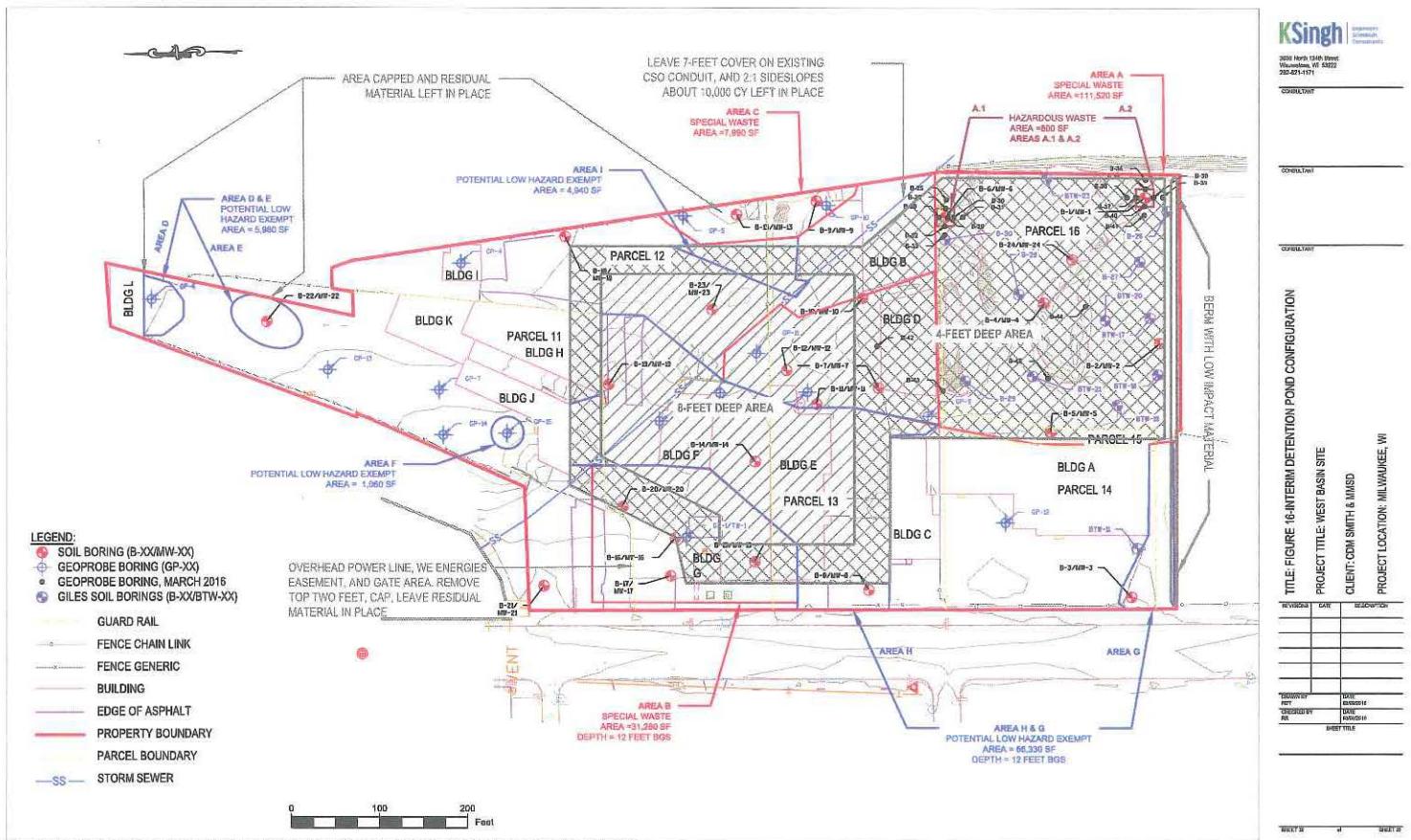
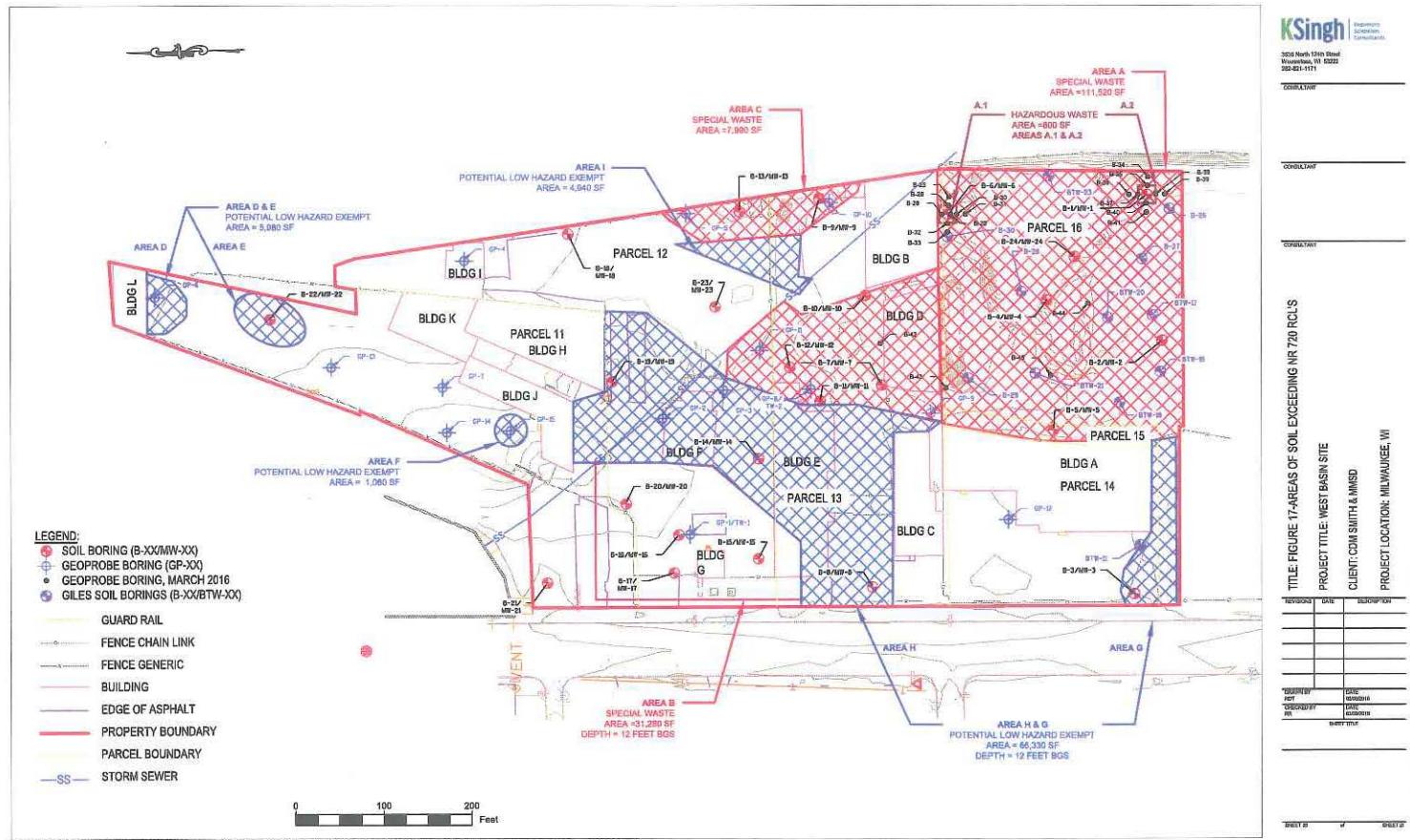


Figure 15 Cross-Section B-B'







TABLES

Table 1
Historic Soil Quality Test Results - Giles Engineering Phase II
West Basin, 30th Street Corridor

Parcel		Parcel 14				Parcel 16									
Sample	Units	BTW-11	BTW-11	BTW-17	BTW-17	BTW-18	BTW-18	BTW-19	BTW-19	BTW-20	BTW-20	BTW-21	BTW-21	BTW-23	B-26
Depth (feet)		2-4	10-12	2-4	10-12	2-4	10-12	2-4	10-12	2-4	10-12	2-4	6-8	2-4	2-4
PID		ND													
Sampling Date		12/24/2008	12/24/2008	12/23/2008	12/23/2008	12/23/2008	12/23/2008	12/23/2008	12/23/2008	12/23/2008	12/23/2008	12/23/2008	12/23/2008	12/23/2008	12/23/2008
Volatile Organic Compounds (VOCs)															
1,2,4-Trichlorobenzene	ug/kg	NT	NT	<53	<53	<53	<53	123	<53	<2,650	<53	<53	<53	<53	<53
1,2,4-Trimethylbenzene	ug/kg	<25	<25	<20	<20	24.8	<20	350	<20	5,600	<20	27.3	<20	<20	<20
1,3,5-Trimethylbenzene	ug/kg	<25	<25	<24	<24	<24	<24	151	<24	2,520	<24	<24	<24	<24	<24
1,4-Dichlorobenzene	ug/kg	NT	NT	<42	<42	<42	<42	64	<42	<2,100	<42	<42	<42	<42	<42
Benzene	ug/kg	<25	<25	<20	<20	<20	<20	43	<20	<1,000	<20	<20	<20	<20	<20
cis-1,2-Dichloroethene	ug/kg	NT	NT	<24	<24	<24	<24	<24	<24	<1,200	<24	<24	<24	<24	<24
Ethylbenzene	ug/kg	<25	<25	<16	<16	<16	<16	72	<16	1,170	<16	43	<16	<16	<16
Isopropylbenzene	ug/kg	NT	NT	<30	<30	<30	<30	32	<30	<1,500	<30	<30	<30	<30	<30
Methyl tert-butyl ether	ug/kg	<25	<25	---	---	---	---	---	---	---	---	---	---	---	---
Methylene Chloride	ug/kg	NT	NT	<44	<44	<44	<44	<44	<44	<1,500	<44	<44	<44	<44	<44
Naphthalene	ug/kg	<25	<25	<117	<117	<117	<117	4,500	<117	139,000	<117	144	<117	<117	<117
n-Butylbenzene	ug/kg	NT	NT	<35	<35	<35	<35	78	<35	<1,750	<35	<35	<35	<35	<35
n-Propylbenzene	ug/kg	NT	NT	<29	<29	<29	<29	33	<29	<900	<29	<29	<29	<29	<29
p-Isopropyltoluene	ug/kg	NT	NT	<30	<30	<30	<30	63	<30	<1,500	<30	<30	<30	<30	<30
sec-Butylbenzene	ug/kg	NT	NT	<25	<25	<25	<25	30.5	<25	<1,250	<25	<25	<25	<25	<25
Tetrachloroethene	ug/kg	NT	NT	<18	<18	<18	<18	<18	<18	<1,450	<18	<18	<18	<18	<18
Toluene	ug/kg	<25	<25	<23	<23	29	<23	50	<23	1,200	<23	<23	<23	<23	<23
Trichloroethene	ug/kg	NT	NT	<20	<20	<20	<20	<20	<20	<1,000	<20	67	<20	<20	<20
Xylenes, Total	ug/kg	<75	<75	<48	<48	54.3	<48	310	<48	6,300	<48	89	<48	<48	<48
Polynuclear Aromatic Hydrocarbons (PAHs)															
1-Methylnaphthalene	ug/kg	<12	<12	74	<12	560	48	5,300	<12	74,000	<12	<120	58	20.6	<12
2-Methylnaphthalene	ug/kg	<9.4	<9.4	44	<9.4	550	24.8	5,200	9.5	132,000	<9.4	<94	20.5	27.5	<9.4
Acenaphthene	ug/kg	<13	<13	<13	18.9	890	23.2	6,900	<13	35,000	23.4	<130	31.5	118	29
Acenaphthylene	ug/kg	<14	<14	17.4	<14	306	<14	570	<14	118,000	23.4	<140	<14	23.8	26.5
Anthracene	ug/kg	12.6	<8.8	64	<8.8	4,800	33	6,100	10.3	137,000	9.3	186	17.6	450	190
Benzo[a]anthracene	ug/kg	27.4	<15	103	<15	1,000	115	6,500	22.1	106,000	16.9	490	26.4	580	820
Benzo[a]pyrene	ug/kg	16.3	<12	102	<7.7	500	47	2,540	<12	44,000	<12	490	31.6	158.0	261
Benzo[b]fluoranthene	ug/kg	16.4	<7.7	129	<7.7	1,250	114	4,600	13.2	89,000	22.1	460	24.0	600	820
Benzo[g,h,i]perylene	ug/kg	<11	<11	52	<11	560	64	1,510	<11	41,000	<11	178	<11	292	910
Benzo[k]fluoranthene	ug/kg	26.6	<11	178	<11	1,590	207	5,300	19.3	111,000	22.1	590	22.5	980	1,330
Chrysene	ug/kg	26	<6.8	119	<6.8	1,420	148	6,500	18.1	93,000	10.2	630	25	700	910
Dibenz(a,h)anthracene	ug/kg	<9.7	<9.7	10	<9.7	126	12.5	520	<9.7	13,100	<9.7	<97	<9.7	57	81
Fluoranthene	ug/kg	51	<11	226	<11	2,050	193	19,800	47	285,000	22.9	720	23.6	1,620	1,520
Fluorene	ug/kg	<12	<12	<12	<12	1,000	27.4	5,700	<12	113,000	<12	<120	35	130	24.2

Table 1
Historic Soil Quality Test Results - Giles Engineering Phase II
West Basin, 30th Street Corridor

Parcel		Parcel 14				Parcel 16									
Sample	Units	BTW-11	BTW-11	BTW-17	BTW-17	BTW-18	BTW-18	BTW-19	BTW-19	BTW-20	BTW-20	BTW-21	BTW-21	BTW-23	B-26
Depth (feet)		2-4	10-12	2-4	10-12	2-4	10-12	2-4	10-12	2-4	10-12	2-4	6-8	2-4	2-4
PID		ND	ND	ND	ND	ND	ND	ND	ND						
Sampling Date		12/24/2008	12/24/2008	12/23/2008	12/23/2008	12/23/2008	12/23/2008	12/23/2008	12/23/2008	12/23/2008	12/23/2008	12/23/2008	12/23/2008	12/23/2008	12/23/2008
Indeno[1,2,3-cd]pyrene	ug/kg	<9.9	<9.9	59	<9.9	320	39	1,870	<9.9	41,000	<9.9	291	13.5	160	257
Naphthalene	ug/kg	<12	<12	30.7	<12	156	21.3	13,300	14.5	420,000	<12	<120	<12	57	<12
Phenanthrene	ug/kg	22.4	<9.4	143	<9.4	1,710	119	19,200	32	390,000	19.1	330	20.7	1,020	380
Pyrene	ug/kg	41	<9.9	234	16.6	4,600	210	25,000	50	218,000	16.1	2,130	115	1,270	1,710
Total Resource Conservation and Recovery Act (RCRA) Metals															
Arsenic	mg/kg	NT	NT	---	---	---	---	1.9	1.6	---	---	2.9	6.4	<0.72	NT
Barium	mg/kg	NT	NT	---	---	---	---	45	35	---	---	280	95	78	NT
Cadmium	mg/kg	NT	NT	<0.4	<0.4	<0.4	<0.4	0.89	0.17	12	<0.4	3.4	0.30	3.3	NT
Chromium	mg/kg	NT	NT	27	20	8.3	18	19	19	44	36	69	21.0	370	NT
Lead	mg/kg	NT	NT	69	10	30	33	44	6.5	340	13	630	19.0	270	NT
Selenium	mg/kg	NT	NT	---	---	---	---	<0.7	<0.7	---	---	<0.7	<0.7	<0.7	NT
Silver	mg/kg	NT	NT	---	---	---	---	<1.7	<1.7	---	---	10	<1.7	<1.7	NT
Mercury	ug/kg	NT	NT	---	---	---	---	81	11	---	---	2,500	66	9.7	NT
Polychlorinated Biphenyls (PCBs)															
Aroclor-1016	ug/kg	NT	NT	NT	NT	NT	<20	NT	NT						
Aroclor-1221	ug/kg	NT	NT	NT	NT	NT	<49	NT	NT						
Aroclor-1232	ug/kg	NT	NT	NT	NT	NT	<72	NT	NT						
Aroclor-1242	ug/kg	NT	NT	NT	NT	NT	<49	NT	NT						
Aroclor-1248	ug/kg	NT	NT	NT	NT	NT	1,300	NT	NT						
Aroclor-1254	ug/kg	NT	NT	NT	NT	NT	<50	NT	NT						
Aroclor-1260	ug/kg	NT	NT	NT	NT	NT	740	NT	NT						

(1) From WDNR RCLs Worksheet dated December 2015.

*Background threshold level for Arsenic is 8 mg/kg. Concentrations below 8 mg/kg are to be considered background.

**Trivalent Chromium values given. Background concentration of Chromium is 44 mg/kg. Concentrations less than 44 mg/kg are to be considered background.

***Background threshold level for Lead is 50 mg/kg. Concentrations below 50 mg/kg are to be considered background.

Bold = Exceeds RCL

Red = Potential Hazardous Waste

Table 1
 Historic Soil Quality Test Results - Giles Engineering Phase II
 West Basin, 30th Street Corridor

Parcel		Parcel 16				Method	NR 720 RCLs for GW Protection (1)	NR 720 RCLs for Direct Contact Protection (1)	Landfill Special Waste Acceptance Limit
Sample	Units	B-27	B-28	B-29	B-30				
Depth (feet)		2-4	2-4	2-4	2-4				
PID		ND	ND	ND	ND				
Sampling Date		12/23/2008	12/23/2008	12/23/2008	12/23/2008				
Volatile Organic Compounds (VOCs)									
1,2,4-Trichlorobenzene	ug/kg	<53	NT	NT	NT	8270D	408	---	---
1,2,4-Trimethylbenzene	ug/kg	<20	NT	NT	NT	8270D	1379.3*	89,800	---
1,3,5-Trimethylbenzene	ug/kg	<24	NT	NT	NT	8270D	1379.3*	182,000	---
1,4-Dichlorobenzene	ug/kg	<42	NT	NT	NT	8270D	144	---	---
Benzene	ug/kg	<20	NT	NT	NT	8270D	5.1	1,490	---
cis-1,2-Dichloroethene	ug/kg	<24	NT	NT	NT	8270D	41.2	156,000	---
Ethylbenzene	ug/kg	<16	NT	NT	NT	8270D	1,570	7,470	---
Isopropylbenzene	ug/kg	<30	NT	NT	NT	8270D	---	---	---
Methyl tert-butyl ether	ug/kg	---	NT	NT	NT	8270D	27	59,400	---
Methylene Chloride	ug/kg	<44	NT	NT	NT	8270D	2.6	---	---
Naphthalene	ug/kg	<117	NT	NT	NT	8270D	658.7	5,150	---
n-Butylbenzene	ug/kg	<35	NT	NT	NT	8270D	---	---	---
n-Propylbenzene	ug/kg	<29	NT	NT	NT	8270D	---	---	---
p-Isopropyltoluene	ug/kg	<30	NT	NT	NT	8270D	---	---	---
sec-Butylbenzene	ug/kg	<25	NT	NT	NT	8270D	---	---	---
Tetrachloroethene	ug/kg	<18	NT	NT	NT	8270D	4.5	30,700	14,000
Toluene	ug/kg	<23	NT	NT	NT	8270D	1,107.20	818,000	---
Trichloroethene	ug/kg	<20	NT	NT	NT	8270D	3.6	644	14,000
Xylenes, Total	ug/kg	<48	NT	NT	NT	8270D	3,940	258,000	4,000
Polynuclear Aromatic Hydrocarbons (PAHs)									
1-Methylnaphthalene	ug/kg	137	NT	NT	NT	8310	---	15,600	---
2-Methylnaphthalene	ug/kg	101	NT	NT	NT	8310	---	229,000	---
Acenaphthene	ug/kg	900	NT	NT	NT	8310	---	3,440,000	---
Acenaphthylene	ug/kg	70	NT	NT	NT	8310	---	---	---
Anthracene	ug/kg	3,200	NT	NT	NT	8310	---	17,200,000	---
Benzo[a]anthracene	ug/kg	4,500	NT	NT	NT	8310	---	148	---
Benzo[a]pyrene	ug/kg	1,810	NT	NT	NT	8310	470	15	---
Benzo[b]fluoranthene	ug/kg	3,600	NT	NT	NT	8310	480	148	---
Benzo[g,h,i]perylene	ug/kg	1,690	NT	NT	NT	8310	---	---	---
Benzo[k]fluoranthene	ug/kg	4,900	NT	NT	NT	8310	---	1,480	---
Chrysene	ug/kg	4,300	NT	NT	NT	8310	145.1	14,800	---
Dibenz(a,h)anthracene	ug/kg	550	NT	NT	NT	8310	---	15	---
Fluoranthene	ug/kg	11,500	NT	NT	NT	8310	88,817.90	2,290	---
Fluorene	ug/kg	1,040	NT	NT	NT	8310	14,814.80	2,290	---

Table 1
Historic Soil Quality Test Results - Giles Engineering Phase II
West Basin, 30th Street Corridor

Parcel		Parcel 16				Method	NR 720 RCLs for GW Protection (1)	NR 720 RCLs for Direct Contact Protection (1)	Landfill Special Waste Acceptance Limit
Sample	Units	B-27	B-28	B-29	B-30				
Depth (feet)		2-4	2-4	2-4	2-4				
PID		ND	ND	ND	ND				
Sampling Date		12/23/2008	12/23/2008	12/23/2008	12/23/2008				
Indeno[1,2,3-cd]pyrene	ug/kg	1,710	NT	NT	NT	8310	---	148	---
Naphthalene	ug/kg	68	NT	NT	NT	8310	658.7	5,150	---
Phenanthrene	ug/kg	5,700	NT	NT	NT	8310	---	---	---
Pyrene	ug/kg	8,400	NT	NT	NT	8310	54,472.50	1,720,000	---
Total Resource Conservation and Recovery Act (RCRA) Contaminants									
Arsenic	mg/kg	NT	---	---	---	6010C	0.584*	0.614*	100
Barium	mg/kg	NT	---	---	---	6010C	164.8	15,300	2,000
Cadmium	mg/kg	NT	1.2	<0.4	<0.4	6010C	0.752	70	20
Chromium	mg/kg	NT	64	17	11	6010C	360000**	100,000**	100
Lead	mg/kg	NT	74	4.8	12	6010C	27***	400***	100
Selenium	mg/kg	NT	---	---	---	6010C	0.26	391	20
Silver	mg/kg	NT	---	---	---	6010C	0.8497	391	100
Mercury	ug/kg	NT	---	---	---	7471B	208	3,130	4,000
Polychlorinated Biphenyls (PCBs)									
Aroclor-1016	ug/kg	<20	NT	NT	NT	8082A	9.4 total	3,930	50,000 total
Aroclor-1221	ug/kg	<49	NT	NT	NT	8082A		159	
Aroclor-1232	ug/kg	<72	NT	NT	NT	8082A		159	
Aroclor-1242	ug/kg	<49	NT	NT	NT	8082A		221	
Aroclor-1248	ug/kg	2,500	NT	NT	NT	8082A		221	
Aroclor-1254	ug/kg	<50	NT	NT	NT	8082A		221	
Aroclor-1260	ug/kg	870	NT	NT	NT	8082A		221	

(1) From WDNR RCLs Worksheet dated December 2008

*Background threshold level for Arsenic is 8 mg/kg. C

**Trivalent Chromium values given. Background conc.

***Background threshold level for Lead is 50 mg/kg. C

Bold = Exceeds RCL

Red = Potential Hazardous Waste

Table 2
 Historic Groundwater Quality Data
 West Basin, 30th Street Corridor - 2014 Phase II Environmental Site Assessment

Sample	BTW-11	BTW-17	BTW-18	BTW-19	BTW-20	BTW-21	BTW-23	Units	Method	NR 140 PAL	NR 140 ES
Date	12/30/2008	12/30/2008	12/23/2008	12/30/2008	12/30/2008	12/23/2008	12/12/2008				
Detected Volatile Organic Compounds (VOCs)											
Benzene	<0.24	<0.24	0.41	<0.24	<0.24	<0.24	0.42	ug/L	8260C	0.5	5
cis-1,2-Dichloroethene	NT	<0.44	<0.44	<0.44	0.84	0.86	<0.44	ug/L	8260C	7	70
Ethylbenzene	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	ug/L	8260C	140	700
Methyl tert-butyl ether	<0.7	ND	ND	ND	ND	ND	ND	ug/L	8260C	12	60
Naphthalene	<1.8	<1.8	<1.8	4.2	24	<1.8	<1.8	ug/L	8260C	10	100
Toluene	3.5	<0.39	<0.39	<0.39	0.56	<0.39	0.44	ug/L	8260C	160	800
Trichloroethene	NT	<0.47	<0.47	<0.47	<0.47	2.5	<0.47	ug/L	8260C	0.5	5
Total Trimethylbenzenes	<0.74	<0.74	0.23	0.25	1.23	<0.74	<0.74	ug/L	8260C	96	480
Vinyl chloride	NT	<0.2	<0.2	<0.2	1.11	0.42	0.33	ug/L	8260C	0.02	0.2
Xylenes, Total	<1.67	<1.67	<1.67	<1.67	0.79	<1.67	<1.67	ug/L	8260C	400	2,000

Italics = Exceeds NR 140 Preventative Action Limits (PAL)

Bold = Exceeds NR 140 Enforcement Limits (ES)

--- No Established Standards

NT = Not Tested

ND = No Detect

Table 3
 Historic Soil Quality Data - 2014 Phase II Environmental Site Assessment
 West Basin, 30th Street Corridor

Sample	GP-1	GP-2	GP-3	GP-4	GP-5	GP-6	GP-7	GP-8	GP-9	GP-10	GP-11	GP-12	GP-13	GP-14	GP-15	Units	Method	NR 720 RCLs for GW Protection	NR 720 RCLs for Direct Contact Protection	
Depth (feet)	8-12	2-3	0-4	2-4	0-4	0-4	0-4	0-4	0-4	0-4	0-4	0-4	0-4	0-4	0-4					
Sampling Date	04/11/2014	04/11/2014	04/11/2014	04/11/2014	04/11/2014	04/11/2014	04/11/2014	04/11/2014	04/11/2014	04/11/2014	04/11/2014	04/11/2014	04/11/2014	04/11/2014	04/11/2014	04/11/2014	04/11/2014	04/11/2014		
Physical Characteristics																				
Percent Moisture	25.8	9.2	20.5	19.3	12.5	5.2	7.2	11.4	31.2	19.2	18.0	12.6	10.8	10.0	10.0	%	---	---		
Percent Solids	74.2	90.8	79.5	80.7	87.5	94.8	92.8	88.6	68.8	80.8	82.0	87.4	89.2	90.0	90.0	%	---	---		
Volatile Organic Compounds (VOCs)																				
1,1,1,2-Tetrachloroethane	<250	<11	<12	<12	<11	<11	<11	<16	<14	<13	<14	<11	<15	<11	<11	ug/kg	8260C	53.3	---	
1,1,1-Trichloroethane	<360	<16	<17	<18	<16	<16	<16	<24	<20	<20	<20	<16	<22	<16	<16	ug/kg	8260C	140.2	640,000	
1,1,2,2-Tetrachloroethane	<290	<13	<14	<14	<13	<13	<13	<19	<16	<16	<16	<13	<18	<13	<13	ug/kg	8260C	0.2	---	
1,1,2-Trichloroethane	<330	<15	<16	<16	<15	<15	<15	<22	<19	<18	<19	<15	<21	<15	<15	ug/kg	8260C	3.2	---	
1,1-Dichloroethane	<310	<14	<15	<15	<14	<14	<14	<21	<18	<17	<18	<14	<20	<14	<14	ug/kg	8260C	483.6	---	
1,1-Dichloroethene	<290	<13	<14	<14	<13	<13	<13	<19	<16	<16	<16	<13	<18	<13	<13	ug/kg	8260C	5	342,000	
1,1-Dichloropropene	<490	<22	<23	<24	<22	<22	<22	<33	<28	<27	<28	<22	<31	<22	<22	ug/kg	8260C	---	---	
1,2,3-Trichlorobenzene	<310	<14	<15	<15	<14	<14	<14	<21	<18	<17	<18	<14	<20	<14	<14	ug/kg	8260C	---	---	
1,2,3-Trichloropropane	<330	<15	<16	<16	<15	<15	<15	<22	<19	<18	<19	<15	<21	<15	<15	ug/kg	8260C	52	---	
1,2,4-Trichlorobenzene	<330	<15	<16	<16	<15	<15	<15	<22	<19	<18	<19	<15	<21	<15	<15	ug/kg	8260C	408	---	
1,2,4-Trimethylbenzene	640	<14	<15	<15	23	<14	<14	460	68	96	190	<14	<20	<14	<14	ug/kg	8260C	1379.3*	89,800	
1,2-Dibromo-3-Chloropropane	<470	<21	<22	<23	<21	<21	<21	<31	<27	<26	<26	<21	<29	<21	<21	ug/kg	8260C	0.2	---	
1,2-Dibromoethane	<270	<12	<13	<13	<12	<12	<12	<12	<18	<15	<15	<12	<17	<12	<12	ug/kg	8260C	0.0282	47	
1,2-Dichlorobenzene	<330	<15	<16	<16	<15	<15	<15	<22	<19	<18	<19	<15	<21	<15	<15	ug/kg	8260C	1,168	---	
1,2-Dichloroethane	<390	<13	<14	<14	<13	<13	<13	<19	<16	<16	<16	<13	<18	<13	<13	ug/kg	8260C	2.8	608	
1,2-Dichloropropene	<330	<15	<16	<16	<15	<15	<15	<22	<19	<18	<19	<15	<21	<15	<15	ug/kg	8260C	3.3	---	
1,3,5-Trimethylbenzene	<290	<13	<14	<14	15	<13	<13	250	58	52	65	<13	<18	<13	<13	ug/kg	8260C	1379.3*	182,000	
1,3-Dichlorobenzene	<270	<12	<13	<13	<12	<12	<12	<18	<15	<15	<15	<12	<17	<12	<12	ug/kg	8260C	1,152.20	---	
1,3-Dichloropropane	<310	<14	<15	<15	<14	<14	<14	<21	<18	<17	<18	<14	<20	<14	<14	ug/kg	8260C	---	---	
1,4-Dichlorobenzene	<270	<12	<13	<13	<12	<12	<12	<18	<15	<15	<15	<12	<17	<12	<12	ug/kg	8260C	144	---	
2,2-Dichloropropane	<330	<15	<16	<16	<15	<15	<15	<22	<19	<18	<19	<15	<21	<15	<15	ug/kg	8260C	---	---	
2-Butanone	<3100	<140	<150	<150	<140	<140	<140	<21	<180	<170	<180	<140	<200	<140	<140	ug/kg	8260C	---	---	
2-Chlorotoluene	<220	<10	<11	<11	<10	<10	<10	<10	<15	<13	<12	<13	<10	<14	<10	<10	ug/kg	8260C	---	---
2-Hexanone	<2900	<130	<14	<14	<130	<130	<130	190	<16	<160	<160	<130	<180	<130	<130	ug/kg	8260C	---	---	
4-Chlorotoluene	<250	<11	<12	<12	<11	<11	<11	<16	<14	<13	<14	<11	<15	<11	<11	ug/kg	8260C	---	---	
4-Methyl-2-pentanone	<3100	<140	<150	<150	<140	<140	<140	210	<180	<170	<180	<140	<200	<140	<140	ug/kg	8260C	---	---	
Acetone	3400	100	160	150	110	100	110	300	170	190	190	110	250	110	110	ug/kg	8260C	---	---	
Benzene	920	<4	<4.3	<4.4	9.0	<4.0	<4.0	83	36	26	110	<4.0	<5.6	<4.0	<4.0	ug/kg	8260C	5.1	1,490	
Bromobenzene	<220	<10	<11	<11	<10	<10	<10	<15	<13	<12	<13	<10	<14	<10	<10	ug/kg	8260C	---	---	
Bromochloromethane	<360	<16	<17	<18	<16	<16	<16	<24	<20	<20	<20	<16	<22	<16	<16	ug/kg	8260C	---	---	
Bromodichloromethane	<330	<15	<16	<16	<15	<15	<15	<22	<19	<19	<19	<15	<21	<15	<15	ug/kg	8260C	0.3	---	
Bromoform	<380	<17	<18	<19	<17	<17	<17	<25	<21	<21	<17	<24	<17	<17	<17	ug/kg	8260C	2.3	---	
Bromomethane	<670	<30	<32	<33	<30	<30	<30	<45	<38</											

Table 3
 Historic Soil Quality Data - 2014 Phase II Environmental Site Assessment
 West Basin, 30th Street Corridor

Sample	GP-1	GP-2	GP-3	GP-4	GP-5	GP-6	GP-7	GP-8	GP-9	GP-10	GP-11	GP-12	GP-13	GP-14	GP-15	Units	Method	NR 720 RCLs for GW Protection	NR 720 RCLs for Direct Contact Protection
Depth (feet)	8-12	2-3	0-4	2-4	0-4	0-4	0-4	0-4	0-4	0-4	0-4	0-4	0-4	0-4	0-4	ug/kg	8260C	27	59,400
Sampling Date	04/11/2014	04/11/2014	04/11/2014	04/11/2014	04/11/2014	04/11/2014	04/11/2014	04/11/2014	04/11/2014	04/11/2014	04/11/2014	04/11/2014	04/11/2014	04/11/2014	04/11/2014	ug/kg	8260C	2.6	---
Methyl tert-butyl ether	250	<11	<12	<12	9.4	<11	<11	<16	43	23	<14	<11	<15	<11	<11	ug/kg	8260C	220	---
Methylene Chloride	2200	39	59	45	39	37	36	51	66	57	65	54	110	39	49	ug/kg	8260C	658.7	5,150
Naphthalene	990	16	<15	16	27	<14	<14	930	130	110	260	<14	<20	<14	<14	ug/kg	8260C	---	---
n-Butylbenzene	7,200	<12	<13	<13	<12	<12	<12	120	<15	28	38	<12	<17	<12	<12	ug/kg	8260C	---	---
n-Propylbenzene	11,000	<13	<14	<14	<13	,13	<13	370	<16	23	58	<13	<18	<13	<13	ug/kg	8260C	---	---
p-Isopropyltoluene	380	<12	<13	<13	<12	<12	<12	88	<15	<15	26	<12	<17	<12	<12	ug/kg	8260C	---	---
sec-Butylbenzene	6,700	<14	<15	<15	<14	<14	<14	110	<18	<17	25	<14	<20	<14	<14	ug/kg	8260C	220	---
Styrene	<200	<9	<9.6	<9.9	<9	<9	<9	<13	<11	<11	<11	<9	<13	<9	<9	ug/kg	8260C	1,107.20	818,000
tert-Butylbenzene	<250	<11	<12	<12	<11	<11	<11	<16	<14	<13	<14	<11	<15	<11	<11	ug/kg	8260C	4.5	30,700
Tetrachloroethene	<400	<18	<19	<20	<18	<18	<18	<27	<23	<23	<18	<25	<18	<18	<18	ug/kg	8260C	0.3	---
Tetrahydrofuran	<310	<140	<150	<150	<140	<140	<140	<210	<18	<170	<180	<14	<200	<14	<14	ug/kg	8260C	---	---
Toluene	340	<14	<12	<12	17	<11	<11	220	61	53	330	28	140	<11	<11	ug/kg	8260C	211,000	---
trans-1,2-Dichloroethene	<310	<140	<15	<150	<140	<140	<140	<21	<18	<17	<18	<14	<20	<14	<14	ug/kg	8260C	3.6	644
trans-1,3-Dichloropropene	<200	<9	<9.6	<9.9	<9	<9	<9	<13	<11	<11	<11	<9	<13	<9	<9	ug/kg	8260C	0.1	67
Trichloroethene	<130	<6	<6.4	<6.6	<6	<6	<6	300	<7.6	<7.3	<7.6	<6	<8.4	<6	<6	ug/kg	8260C	0.1	67
Trichlorofluoromethane	<330	<15	<16	<16	<15	<15	<15	<22	<19	<18	<19	<15	26	<15	<15	ug/kg	8260C	---	---
Vinyl acetate	<3300	<150	<160	<160	<150	<150	<150	<220	<190	<180	<190	<150	<210	<150	<150	ug/kg	8260C	220	---
Vinyl chloride	<270	<120	<13	<13	<12	<12	<12	<18	<15	<15	<15	<12	<17	<12	<12	ug/kg	8260C	0.3	---
Xylenes, Total	<940	<34	<36	<37	56	<34	<34	660	170	197	390	34	48	34	34	ug/kg	8260C	3,940	258,000
Polynuclear Aromatic Hydrocarbons (PAHs)																			
1-Methylnaphthalene	<750	25000	<70	<140	<630	<58	<12	<62	<800	<1400	<680	<13	<62	<12	<12	ug/kg	8270D	---	15,600
2-Methylnaphthalene	9500	<7200	<82	<160	<740	<69	<14	<73	<950	<1600	<800	<15	<73	<15	<14	ug/kg	8270D	470	229,000
Acenaphthene	<1600	<13000	<150	<290	<130	<120	<25	<130	<1700	<2900	<1400	<26	<130	<26	<26	ug/kg	8270D	3,440,000	---
Acenaphthylene	<810	<6600	<76	<150	<69	<63	<13	<68	<880	<1500	<740	<14	<67	<13	<13	ug/kg	8270D	148	---
Anthracene	<410	200000	<38	<7.5	42	<32	<6.5	68	960	1200	<370	<6.9	<34	<6.7	<6.7	ug/kg	8270D	480	17,200,000
Benzo[a]anthracene	<20	200000	160	<0.37	470	140	<0.33	<1.7	4700	25000	1800	<0.34	38	52	74	ug/kg	8270D	15	148
Benzo[a]pyrene	<61	70000	<5.7	<1.1	130	170	<0.98	<5.1	2300	5500	<55	<1.0	7.9	6.9	18	ug/kg	8270D	27	400
Benzo[b]fluoranthene	<160	80000	<15	<2.9	220	150	<2.5	<13	2700	4400	<140	<2.6	<13	12	15	ug/kg	8270D	148	---
Benzo[g,h,i]perylene	<270	70000	<25	<5.0	190	200	<4.3	<23	2800	4200	670	<4.6	<22	13	13	ug/kg	8270D	1,480	---
Benzo[k]fluoranthene	<68	56000	<6.3	<1.2	91	78	<1.1	<5.6	1300	2400	250	4.1	18	7.3	7.3	ug/kg	8270D	145.1	14,800
Chrysene	1400	130000	<16	<3.2	270	170	10	110	3600	7000	<160	11	17	9.5	16	ug/kg	8270D	88,817.90	2,290
Dibenz(a,h)anthracene	<340	17000	<32	<6.2	31	26	<5.4	<28	420	670	<310	<5.7	<28	<5.6	<5.6	ug/kg	8270D	0.52	15
Fluoranthene	1200	350000	<8.9	<1.7	390	110	<1.5	150	7000	16000	1900	<1.6	27	19	42	ug/kg	8270D	14,814.80	2,290
Fluorene	<540	180000	<51	<10	<46	<42	<8.7	<45	690	<990	<490	<9.2	45	<8.9	<8.9	ug/kg	8270D	27	400
Indeno[1,2,3-cd]pyrene	<340	76000	<32	<6.2	190	120	<5.4	<28	2500	3800	<310	<5.7	<28	7.4	23	ug/kg	8270D	0.52	148
Naphthalene	<750	76000	<70	<14	<63	<58	<12	<62	800	<1400	<680	<13	<62	<12	<12	ug/kg	8270D	658.7	5,150
Phenanthrene	2600	690000	<25	<5	300	<21	<4.3												

Table 3
 Historic Soil Quality Data - 2014 Phase II Environmental Site Assessment
 West Basin, 30th Street Corridor

Sample	GP-1	GP-2	GP-3	GP-4	GP-5	GP-6	GP-7	GP-8	GP-9	GP-10	GP-11	GP-12	GP-13	GP-14	GP-15	Units	Method	NR 720 RCLs for GW Protection	NR 720 RCLs for Direct Contact Protection
Depth (feet)	8-12	2-3	0-4	2-4	0-4	0-4	0-4	0-4	0-4	0-4	0-4	0-4	0-4	0-4	0-4				
Sampling Date	04/11/2014	04/11/2014	04/11/2014	04/11/2014	04/11/2014	04/11/2014	04/11/2014	04/11/2014	04/11/2014	04/11/2014	04/11/2014	04/11/2014	04/11/2014	04/11/2014	04/11/2014	04/11/2014	04/11/2014	04/11/2014	04/11/2014
Aroclor-1242	<9.4	<7.7	<8.8	<8.6	<8	<7.4	<7.5	<7.8	<51	<8.7	<8.5	<8	<7.8	<7.8	<7.8	ug/kg	8282A		744
Aroclor-1248	<9.4	<7.7	<8.8	<8.6	<8	<7.4	<7.5	<7.8	<51	<8.7	<8.5	<8	<7.8	<7.8	<7.8	ug/kg	8282A		744
Aroclor-1254	<12	<9.9	<11	<11	<10	<9.6	<9.6	<10	<65	<11	<11	<10	<10	<10	<10	ug/kg	8282A		744
Aroclor-1260	<8	<6.6	<7.5	<7.4	110	<6.3	<6.4	<6.7	5400	<7.4	28	<6.8	<6.7	<6.7	<6.7	ug/kg	8282A		744

*Background threshold level for Arsenic is 8 mg/kg. Concentrations below 8 mg/kg are to be considered background.

**Trivalent Chromium values given. Background concentration of Chromium is 44 mg/kg. Concentrations less than 44 mg/kg are to be considered background.

Table 4
Historic Groundwater Quality Data
West Basin, 30th Street Corridor - 2014 Phase II Environmental Site Assessment

Sample	TW-1	TW-2	Units	Method	NR 140 PAL	NR 140 ES
Date	04/16/2014	04/16/2014				
Volatile Organic Compounds (VOCs)						
1,1,1,2-Tetrachloroethane	<1.2	<0.60	ug/L	8260C	7	70
1,1,1-Trichloroethane	<0.50	<0.25	ug/L	8260C	40	200
1,1,2,2-Tetrachloroethane	<1.0	<0.50	ug/L	8260C	0.02	0.2
1,1,2-Trichloroethane	<0.42	<0.21	ug/L	8260C	0.5	5
1,1-Dichloroethane	<1.0	<0.50	ug/L	8260C	85	850
1,1-Dichloroethene	<0.46	<0.23	ug/L	8260C	0.7	7
1,1-Dichloropropene	<0.80	<0.40	ug/L	8260C	---	---
1,2,3-Trichlorobenzene	<0.80	<0.40	ug/L	8260C	---	---
1,2,3-Trichloropropane	<1.4	<0.70	ug/L	8260C	12	60
1,2,4-Trichlorobenzene	<1.0	<0.50	ug/L	8260C	14	70
1,2,4-Trimethylbenzene	4.9	<0.60	ug/L	8260C	96	480
1,2-Dibromo-3-Chloropropane	<1.4	<0.70	ug/L	8260C	0.02	0.2
1,2-Dibromoethane	<0.80	<0.40	ug/L	8260C	0.005	0.05
1,2-Dichlorobenzene	<1.2	<0.60	ug/L	8260C	60	600
1,2-Dichloroethane	<0.40	<0.20	ug/L	8260C	0.5	5
1,2-Dichloropropene	<1.0	<0.50	ug/L	8260C	0.5	5
1,3,5-Trimethylbenzene	<1.0	<0.50	ug/L	8260C	96	480
1,3-Dichlorobenzene	<1.0	<0.50	ug/L	8260C	60	600
1,3-Dichloropropane	<0.80	<0.40	ug/L	8260C	---	---
1,4-Dichlorobenzene	<1.0	<0.50	ug/L	8260C	15	75
2,2-Dichloropropene	<1.2	<0.60	ug/L	8260C	---	---
2-Chlorotoluene	<1.2	<0.60	ug/L	8260C	---	---
4-Chlorotoluene	<1.2	<0.60	ug/L	8260C	---	---
Benzene	32	<0.25	ug/L	8260C	0.5	5
Bromobenzene	<1.0	<0.50	ug/L	8260C	---	---
Bromoform	<0.80	<0.40	ug/L	8260C	---	---
Bromomethane	<1.0	<0.50	ug/L	8260C	0.06	0.6
Bromoform	<1.0	<0.50	ug/L	8260C	0.44	4.4
Bromomethane	<2.0	<1.0	ug/L	8260C	1	10
Carbon tetrachloride	<0.80	<0.40	ug/L	8260C	0.5	5
Chlorobenzene	<1.0	<0.50	ug/L	8260C	---	---
Chloroethane	<1.6	<0.80	ug/L	8260C	80	400
Chloroform	<0.54	<0.27	ug/L	8260C	0.6	6
Chloromethane	<1.2	<0.60	ug/L	8260C	3	30
cis-1,2-Dichloroethene	<0.42	0.27	ug/L	8260C	7	70
cis-1,3-Dichloropropene	<0.80	<0.40	ug/L	8260C	0.04	0.4
Dibromochloromethane	<0.80	<0.40	ug/L	8260C	6	60
Dibromomethane	<1.2	<0.60	ug/L	8260C	---	---
Dichlorodifluoromethane	<1.2	<0.60	ug/L	8260C	200	1,000
Ethylbenzene	4.7	<0.50	ug/L	8260C	140	700
Hexachlorobutadiene	<1.6	<0.80	ug/L	8260C	0.1	1
Isopropylbenzene	16	<0.40	ug/L	8260C	---	---
Methyl tert-butyl ether	<0.40	<0.20	ug/L	8260C	12	60

Table 4
Historic Groundwater Quality Data
West Basin, 30th Street Corridor - 2014 Phase II Environmental Site Assessment

Sample	TW-1	TW-2	Units	Method	NR 140 PAL	NR 140 ES
Date	04/16/2014	04/16/2014				
Methylene Chloride	2.6	<0.50	ug/L	8260C	0.5	5
Naphthalene	4.2	<0.50	ug/L	8260C	10	100
n-Butylbenzene	19	<0.40	ug/L	8260C	---	---
n-Propylbenzene	34	<0.40	ug/L	8260C	---	---
p-Isopropyltoluene	1.1	<0.50	ug/L	8260C	---	---
sec-Butylbenzene	22	<0.50	ug/L	8260C	---	---
Styrene	<0.80	<0.40	ug/L	8260C	10	100
tert-Butylbenzene	<1.0	<0.50	ug/L	8260C	---	---
Tetrachloroethene	<0.48	<0.24	ug/L	8260C	0.5	5
Toluene	1.4	<0.50	ug/L	8260C	160	800
trans-1,2-Dichloroethene	<0.40	<0.20	ug/L	8260C	20	100
trans-1,3-Dichloropropene	<0.80	<0.40	ug/L	8260C	0.04	0.4
Trichloroethene	<0.48	<0.24	ug/L	8260C	0.5	5
Trichlorofluoromethane	<0.60	<0.30	ug/L	8260C	---	---
Vinyl chloride	<0.36	0.24	ug/L	8260C	0.02	0.2
Xylenes, Total	4	<1.5	ug/L	8260C	400	2,000
Polynuclear Aromatic Hydrocarbons (PAHs)						
1-Methylnaphthalene	<300	<800	ug/L	8270D	---	---
2-Methylnaphthalene	<300	<950	ug/L	8270D	---	---
Acenaphthene	<300	<1700	ug/L	8270D	---	---
Acenaphthylene	<300	<880	ug/L	8270D	---	---
Anthracene	<91	960	ug/L	8270D	600	3,000
Benzo[a]anthracene	240	4,700	ug/L	8270D	---	---
Benzo[a]pyrene	<24	2,300	ug/L	8270D	0.02	0.2
Benzo[b]fluoranthene	<18	2,700	ug/L	8270D	0.02	0.2
Benzo[g,h,i]perylene	<37	2,800	ug/L	8270D	---	---
Benzo[k]fluoranthene	<11	1,300	ug/L	8270D	---	---
Chrysene	310	3,600	ug/L	8270D	0.02	0.2
Dibenz(a,h)anthracene	<55	420	ug/L	8270D	---	---
Fluoranthene	83	700	ug/L	8270D	80	400
Fluorene	<160	690	ug/L	8270D	80	400
Indeno[1,2,3-cd]pyrene	<30	2,500	ug/L	8270D	---	---
Naphthalene	<300	<800	ug/L	8270D	10	100
Phenanthrene	<67	5,200	ug/L	8270D	---	---
Pyrene	<73	9,600	ug/L	8270D	50	250

Italics = Exceeds NR 140 Preventative Action Limits (PAL)

Bold = Exceeds NR 140 Enforcement Limits (ES)

--- No Established Standards

TMBs combined compared to standards.

Table 5
Soil Quality Test Results - 2016 Phase II ESA and Supplemental Investigation
West Basin, 30th Street Corridor

Table 5
 Soil Quality Test Results - 2016 Phase II ESA and Supplemental Investigation
 West Basin, 30th Street Corridor

Parcel	Parcel 11															Parcel 12									
	Sample	Units	Method	NR 720 RCLs for GW Protection (1)	NR 720 RCLs for Direct Contact Protection (1)	Landfill Special Waste Acceptance Limit	B-21	B-22	B-22	B-13	B-13	B-14	B-15	B-16	B-16	B-17	B-17	B-18	B-18	B-19	B-19	B-20			
							2-4	4-6	6-8	6-7	8-12	12-16	8-12	1-2.5	8.5-10	3.5-4	6-7.5	11-12.5	3.5-5	3.5-4					
							> 14	> 10	> 10	4-5	4-5	6-7	6-7	8-9	8-9	7-8	Unknown	Unknown	> 15	7-8					
Sampling Date							01/08/2016	01/08/2016	01/08/2016	01/08/2016	01/08/2016	01/07/2016	01/07/2016	01/07/2016	01/07/2016	01/07/2016	01/07/2016	01/07/2016	01/07/2016	01/07/2016	01/07/2016	01/07/2016	01/07/2016	01/07/2016	
Dibromomethane	ug/kg	8270D	---	---	---	---	NT																		
Dichlorodifluoromethane	ug/kg	8270D	3,082.50	---	---	---	NT																		
Ethylbenzene	ug/kg	8270D	1,570	7,470	---	---	<25	NT	NT	<25	<25	<25	<25	<25	124	<25	<25	<25	<25	<25	<25	<25	<25	<25	
Hexachlorobutadiene	ug/kg	8270D	25.2	---	---	---	NT																		
Isopropylbenzene	ug/kg	8270D	---	---	---	---	NT																		
Methyl tert-butyl ether	ug/kg	8270D	27	59,400	---	---	<25	NT	NT	<25	<25	<25	<25	<25	94.1	<25	<25	<25	<25	<25	<25	<25	<25	<25	
Methylene Chloride	ug/kg	8270D	2.6	---	---	---	NT																		
Naphthalene	ug/kg	8270D	658.7	5,150	---	---	NT																		
n-Butylbenzene	ug/kg	8270D	---	---	---	---	NT																		
n-Propylbenzene	ug/kg	8270D	---	---	---	---	NT																		
p-Isopropyltoluene	ug/kg	8270D	---	---	---	---	NT																		
sec-Butylbenzene	ug/kg	8270D	---	---	---	---	NT																		
Styrene	ug/kg	8270D	220	---	---	---	NT																		
tert-Butylbenzene	ug/kg	8270D	---	---	---	---	NT																		
Tetrachloroethene	ug/kg	8270D	4.5	30,700	14,000	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
Toluene	ug/kg	8270D	1,107.20	818,000	---	---	<25	NT	NT	<25	<25	<25	<25	<25	80.6	<25	<25	<25	<25	<25	<25	<25	<25	<25	
trans-1,2-Dichloroethene	ug/kg	8270D	58.8	211,000	---	---	NT																		
trans-1,3-Dichloropropene	ug/kg	8270D	0.3	---	---	---	NT																		
Trichloroethene	ug/kg	8270D	3.6	644	14,000	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
Trichlorofluoromethane	ug/kg	8270D	---	---	---	---	NT																		
Vinyl chloride	ug/kg	8270D	0.1	67	---	---	NT																		
Xylenes, Total	ug/kg	8270D	3,940	258,000	4,000	<50	NT	NT	NT	<50	<50	<50	<50	<50	176.1	<50	<50	<50	<50	<50	<50	<50	<50	<50	
Polynuclear Aromatic Hydrocarbons (PAHs)																									
1-Methylnaphthalene	ug/kg	8310	---	15,600	---	<35	<36	<35	<51	<22	<360	<410	<31	478	<36	<20	<20	<190	<360						
2-Methylnaphthalene	ug/kg	8310	---	229,000	---	<32	<31	<31	<63	<27	<330	<360	<28	1,250	<32	<24	<24	<170	<320						
Acenaphthene	ug/kg	8310	---	3,440,000	---	<46	<45	<45	<51	<22	<470	<530	<40	<530	<46	<20	<20	<250	<470						
Acenaphthylene	ug/kg	8310	---	---	---	<41	<41	<41	<36	<15	<420	<470	<36	<470	<42	<14	<14	<220	<420						
Anthracene	ug/kg	8310	---	17,200,000	---	<12	<12	<12	142	<20	<120	<140	<10	<130	<12	<19	<19	<63	<120						
Benzo[a]anthracene	ug/kg	8310	---	148	---	<1.4	<1.4	<1.4	604	<29	118	103	<1.2	<16	<1.4	<27	<27	62.2	218						
Benzo[a]pyrene	ug/kg	8310	470	15	---	<2.0	<2.0	<2.0	612	<32	115	89.6	<1.8	45.6	11.2	<29	<29	30.5	87.0						
Benzo[b]fluoranthene	ug/kg	8310	480	148	---	<2.4	<2.3	<2.3	972	<37	121	<27	<2.1	<27	<2.4	<34	<34	69.0	130						
Benzo[g,h,i]perylene	ug/kg	8310	---	---	---	<4.7	<4.6	<4.6	663	<51	<48	<54	<												

Table 5
Soil Quality Test Results - 2016 Phase II ESA and Supplemental Investigation
West Basin, 30th Street Corridor

Parcel		Parcel 11					Parcel 12											
Sample	Units	Method	NR 720 RCLs for GW Protection (1)	Landfill Special Waste Acceptance Limit	B-21	B-22	B-22	B-13	B-13	B-14	B-15	B-16	B-16	B-17	B-18	B-18	B-19	B-20
Depth (feet)					2-4	4-6	6-8	6-7	8-12	12-16	8-12	1-2.5	8.5-10	3.5-4	6-7.5	11-12.5	3.5-5	3.5-4
Depth to Groundwater (feet)					> 14	> 10	> 10	4-5	4-5	6-7	6-7	8-9	8-9	7-8	Unknown	Unknown	> 15	7-8
Sampling Date					01/08/2016	01/08/2016	01/08/2016	01/08/2016	01/08/2016	01/07/2016	01/07/2016	01/07/2016	01/07/2016	01/07/2016	01/07/2016	01/07/2016	01/07/2016	01/07/2016
Polychlorinated Biphenyls (PCBs)																		
Aroclor-1016	ug/kg	8082A	9.4 total	3,930	50,000 total	NT	NT	NT	NT	NT	~ NT	NT	NT	NT	NT	NT	NT	NT
Aroclor-1221	ug/kg	8082A		159		NT												
Aroclor-1232	ug/kg	8082A		159		NT												
Aroclor-1242	ug/kg	8082A		221		NT												
Aroclor-1248	ug/kg	8082A		221		NT												
Aroclor-1254	ug/kg	8082A		221		NT												
Aroclor-1260	ug/kg	8082A		221		NT												
Semi-Volatile Organic Compounds (SVOCs)																		
1,2,4,5-Tetrachlorobenzene	ug/kg	8270D		23,500	---	NT	NT	NT	ND	ND	NT	NT	NT	NT	ND	ND	NT	NT
1,2,4-Trichlorobenzene	ug/kg	8270D		22,000	---	NT	NT	NT	ND	ND	NT	NT	NT	NT	ND	ND	NT	NT
1,2-Dichlorobenzene	ug/kg	8270D			---	NT	NT	NT	ND	ND	NT	NT	NT	NT	ND	ND	NT	NT
1,3-Dichlorobenzene	ug/kg	8270D			---	NT	NT	NT	ND	ND	NT	NT	NT	NT	ND	ND	NT	NT
2,4,5-Trichlorophenol	ug/kg	8270D		6,110,000	---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND	NT	NT
2,4,6-Trichlorophenol	ug/kg	8270D		44,100	---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND	NT	NT
2,4-Dichlorophenol	ug/kg	8270D			---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND	NT	NT
2,4-Dimethylphenol	ug/kg	8270D			---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND	NT	NT
2,4-Dinitrotoluene	ug/kg	8270D			---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND	NT	NT
2-Chloronaphthalene	ug/kg	8270D			---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND	NT	NT
2-Chlorophenol	ug/kg	8270D			---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND	NT	NT
2-Methylphenol	ug/kg	8270D			---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND	NT	NT
2-Nitroaniline	ug/kg	8270D			---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND	NT	NT
2-Nitrophenol	ug/kg	8270D			---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND	NT	NT
3 & 4-Methylphenol	ug/kg	8270D			---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND	NT	NT
3,3'-Dichlorobenzene	ug/kg	8270D			---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND	NT	NT
3-Nitroaniline	ug/kg	8270D			---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND	NT	NT
4,6-Dinitro-2-methylphenol	ug/kg	8270D			---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND	NT	NT
4-Bromophenyl-phenyl ether	ug/kg	8270D			---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND	NT	NT
4-Chloro-3-methylphenol	ug/kg	8270D			---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND	NT	NT
4-Chloroaniline	ug/kg	8270D			---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND	NT	NT
4-Chlorophenyl-phenyl ether	ug/kg	8270D			---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND	NT	NT
4-Nitroaniline	ug/kg	8270D			---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND	NT	NT
4-Nitrophenol	ug/kg	8270D			---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND	NT	NT
Acetophenone	ug/kg	8270D		2,520,000	---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND	NT	NT
Aniline	ug/kg	8270D		85,200	---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND	NT	NT
Azobenzene & 1,2-Diphenylhydrazine	ug/kg	8270D			---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND	NT	NT
Benzidine	ug/kg	8270D		0.3	---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND	NT	NT
Benzyl alcohol	ug/kg	8270D		6,110,000	---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND	NT	NT
Bis(2-chloroethoxy)methane	ug/kg	8270D			---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND	NT	NT
Bis(2-chloroethyl)ether	ug/kg	8270D		183,000	---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND	NT	NT
Bis(2-chloroisopropyl)ether	ug/kg	8270D		265	---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND	NT	NT
Bis(2-ethylhexyl)phthalate	ug/kg	8270D	2,880	34,700	---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND	NT	NT
Carbazole	ug/kg	8270D	---	---	---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND	NT	NT
Di-n-butylphthalate	ug/kg	8270D	---	---	---	NT	NT	ND	181	94.3	NT	NT	NT	NT	49.8	56.8	NT	NT
Di-n-octylphthalate	ug/kg	8270D	---	---	---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND	NT	NT
Dibenzofuran	ug/kg	8270D	---	72,200	---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND	NT	NT
Diethylphthalate	ug/kg																	

Table 5
Soil Quality Test Results - 2016 Phase II ESA and Supplemental Investigation
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Parcel		Sample	Units	Method	NR 720 RCLs for GW Protection (1)	NR 720 RCLs for Direct Contact Protection (1)	Landfill Special Waste Acceptance Limit	Parcel 11				Parcel 12				
Depth (feet)	Depth to Groundwater (feet)							B-21	B-22	B-22	B-13	B-13	B-14	B-15	B-16	B-20
Sampling Date								01/08/2016	01/08/2016	01/08/2016	01/08/2016	01/08/2016	01/07/2016	01/07/2016	01/07/2016	01/07/2016
Hexachlorocyclopentadiene	ug/kg							---	NT	NT	ND	ND	NT	NT	NT	NT
Hexachloroethane	ug/kg							2-4	4-6	6-8	6-7	8-12	12-16	8-12	1-2.5	8.5-10
Hexachloropropene	ug/kg							> 14	> 10	> 10	4-5	4-5	6-7	6-7	8-9	3.5-4
Isophorone	ug/kg							43,800	---	NT	NT	ND	ND	NT	NT	6-7.5
N-Nitroso-di-n-propylamine	ug/kg							69	---	NT	NT	ND	ND	NT	NT	11-12.5
N-Nitrosodimethylamine	ug/kg							2	---	NT	NT	ND	ND	NT	NT	ND
N-Nitrosodiphenylamine & Diphn	ug/kg							99,100	---	NT	NT	ND	ND	NT	NT	ND
N-Nitrosopyrrolidine	ug/kg							231	---	NT	NT	ND	ND	NT	NT	ND
Nitrobenzene	ug/kg							6,920	---	NT	NT	ND	ND	NT	NT	ND
Pentachlorophenol	ug/kg							892	---	NT	NT	ND	ND	NT	NT	ND
Phenol	ug/kg							18,300,000	---	NT	NT	ND	ND	NT	NT	ND
Pyridine	ug/kg							78,200	---	NT	NT	ND	ND	NT	NT	ND
Pesticides																
4,4'-DDD	mg/kg	8081B	---	2.03	---	NT	NT	ND	ND	NT	NT	NT	NT	NT	0.000691	ND
4,4'-DDE	mg/kg	8081B	---	1.43	---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND
4,4'-DDT	mg/kg	8081B	---	1.72	---	NT	NT	NT	0.0512	ND	NT	NT	NT	NT	0.00115	ND
Aldrin	mg/kg	8081B	---	0.029	---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND
alpha-BHC	mg/kg	8081B	---	---	---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND
alpha-Chlordane	mg/kg	8081B	---	---	---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND
beta-BHC	mg/kg	8081B	---	---	---	NT	NT	0.0071	ND	NT	NT	NT	NT	NT	0.0155	0.00103
Chlordane	mg/kg	8081B	---	1.62	---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND
delta-BHC	mg/kg	8081B	---	---	---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND
Dieldrin	mg/kg	8081B	---	0.03	---	NT	NT	0.0680	0.000893	NT	NT	NT	NT	NT	ND	ND
Endosulfan I	mg/kg	8081B	---	367	---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND
Endosulfan II	mg/kg	8081B	---	367	---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND
Endosulfan Sulfate	mg/kg	8081B	---	---	---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND
Endrin	mg/kg	8081B	0.1616	18.3	---	NT	NT	0.0139	ND	NT	NT	NT	NT	NT	ND	0.000572
Endrin aldehyde	mg/kg	8081B	---	---	---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND
Endrin ketone	mg/kg	8081B	---	---	---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND
gamma-Chlordane	mg/kg	8081B	---	---	---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND
Heptachlor	mg/kg	8081B	0.0662	0.108	---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND
Heptachlor epoxide	mg/kg	8081B	0.0082	0.053	---	NT	NT	0.00355	ND	NT	NT	NT	NT	NT	ND	ND
Lindane	mg/kg	8081B	0.0023	0.517	---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND
Methoxychlor	mg/kg	8081B	4.32	306	---	NT	NT	0.0364	ND	NT	NT	NT	NT	NT	ND	0.000801
Toxaphene	mg/kg	8081B	0.928	0.442	---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND
Herbicides																
4,4'-DDD	ug/kg	SW8151	---	---	---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND
4,4'-DDE	ug/kg	SW8151	---	---	---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND
4,4'-DDT	ug/kg	SW8151	---	---	---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND
Aldrin	ug/kg	SW8151	155.1	1,830,000	---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND
alpha-BHC	ug/kg	SW8151	20.2	894	---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND
alpha-Chlordane	ug/kg	SW8151	---	---	---	NT	NT	ND	ND	NT	NT	NT	NT	NT	ND	ND
Total Characteristic Leaching Protocol (TCLP) RCRA Metals																
Arsenic	mg/L	EPA 6010C	---	---	5	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Barium	mg/L	EPA 6010C	---	---	100	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Cadmium	mg/L	EPA 6010C	---	---	1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Chromium	mg/L	EPA 6010C	---	---	5	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Copper	mg/L	EPA 6010C	---	---	---	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Lead	mg/L	EPA 6010C	---	---	5	NT	NT	NT	NT	NT	NT	0.051	NT	NT	NT	NT

Table 5
 Soil Quality Test Results - 2016 Phase II ESA and Supplemental Investigation
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Parcel		Parcel 11					Parcel 12												
Sample	Units	Method	NR 720 RCLs for GW Protection (1)	NR 720 RCLs for Direct Contact Protection (1)	Landfill Special Waste Acceptance Limit	B-21	B-22	B-22	B-13	B-13	B-14	B-15	B-16	B-16	B-17	B-18	B-18	B-19	B-20
Depth (feet)						2-4	4-6	6-8	6-7	8-12	12-16	8-12	1-2.5	8.5-10	3.5-4	6-7.5	11-12.5	3.5-5	3.5-4
Depth to Groundwater (feet)						> 14	> 10	> 10	4-5	4-5	6-7	6-7	8-9	8-9	7-8	Unknown	Unknown	> 15	7-8
Sampling Date						01/08/2016	01/08/2016	01/08/2016	01/08/2016	01/08/2016	01/07/2016	01/07/2016	01/07/2016	01/07/2016	01/07/2016	01/07/2016	01/07/2016	01/07/2016	
Selenium	mg/L	EPA 6010C	---	---	1	NT	NT												
Silver	mg/L	EPA 6010C	---	---	5	NT	NT												
Zinc	mg/L	EPA 6010C	---	---	---	NT	NT												
Mercury	mg/L	EPA 7470A	---	---	0.2	NT	NT												
TCLP VOCs																			
1,1-Dichloroethene	mg/L	EPA 8260C	---	---	0.7	NT	NT												
1,2-Dichloroethane	mg/L	EPA 8260C	---	---	0.5	NT	NT												
2-Butanone	mg/L	EPA 8260C	---	---	---	NT	NT												
Benzene	mg/L	EPA 8260C	---	---	0.5	NT	NT												
Carbon tetrachloride	mg/L	EPA 8260C	---	---	0.5	NT	NT												
Chlorobenzene	mg/L	EPA 8260C	---	---	100	NT	NT												
Chloroform	mg/L	EPA 8260C	---	---	6	NT	NT												
Tetrachloroethene	mg/L	EPA 8260C	---	---	0.7	NT	NT												
Trichloroethene	mg/L	EPA 8260C	---	---	0.5	NT	NT												
Vinyl chloride	mg/L	EPA 8260C	---	---	0.2	NT	NT												
TCLP Semi-Volatiles																			
1,4-Dichlorobenzene	mg/L	EPA 8270D	---	---	7.5	NT	NT												
2,4,5-Trichlorophenol	mg/L	EPA 8270D	---	---	400	NT	NT												
2,4,6-Trichlorophenol	mg/L	EPA 8270D	---	---	2	NT	NT												
2,4-Dinitrotoluene	mg/L	EPA 8270D	---	---	0.13	NT	NT												
2-Methylphenol	mg/L	EPA 8270D	---	---	---	NT	NT												
3 & 4-Methylphenol	mg/L	EPA 8270D	---	---	---	NT	NT												
Hexachlorobenzene	mg/L	EPA 8270D	---	---	0.13	NT	NT												
Hexachlorobutadiene	mg/L	EPA 8270D	---	---	0.5	NT	NT												
Hexachloroethane	mg/L	EPA 8270D	---	---	3	NT	NT												
Nitrobenzene	mg/L	EPA 8270D	---	---	2	NT	NT												
Pentachlorophenol	mg/L	EPA 8270D	---	---	100	NT	NT												
Pyridine	mg/L	EPA 8270D	---	---	5	NT	NT												
Other																			
Phenolics	mg/L	EPA 9066	---	---	2,000	NT	NT												

(1) From WDNR RCLs Worksheet dated December 2015.

*Background threshold level for Arsenic is 8 mg/kg. Concentrations below 8 mg/kg are to be considered background.

**Trivalent Chromium values given. Background concentration of Chromium is 44 mg/kg. Concentrations less than 44 mg/kg are to be considered background.

***Background threshold level for Lead is 50 mg/kg. Concentrations below 50 mg/kg are to be considered background.

Bold = Exceeds RCL

Red = Potential Hazardous Waste

Table 5
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West Basin, 30th Street Corridor

Table 5
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Parcel						Parcel 12			Parcel 13						Parcel 14		Parcel 15		Parcel 16
Sample	Units	Method	NR 720 RCLs for GW Protection (1)	NR 720 RCLs for Direct Contact Protection (1)	Landfill Special Waste Acceptance Limit	B-23	B-23	B-8	B-9	B-10	B-10	B-11	B-12	B-12	B-42	B-3	B-5	B-5	B-1
Depth (feet)						8-12	12-16	4-8	6-7.5	0-4	8-12	0-4	8.5-10	13.5-15	2-4	6-8	1-2.5	6-7.5	3.5-5
Depth to Groundwater (feet)						6-7	6-7	6-7	3-4	5-6	5-6	6-7	7-8	7-8	6-7	4-5	6-7	6-7	4-5
Sampling Date						01/07/2016	01/07/2016	01/08/2016	01/07/2016	01/08/2016	01/08/2016	01/08/2016	01/07/2016	01/07/2016	03/08/2016	01/08/2016	01/12/2016	01/12/2016	01/14/2016
Dibromomethane	ug/kg	8270D	---	---	---	NT	NT	ND											
Dichlorodifluoromethane	ug/kg	8270D	3,082.50	---	---	NT	NT	ND	ND	ND	~ ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ug/kg	8270D	1,570	7,470	---	<25	<25	ND	34.2	ND	60.2								
Hexachlorobutadiene	ug/kg	8270D	25.2	---	---	NT	NT	ND											
Isopropylbenzene	ug/kg	8270D	---	---	---	NT	NT	ND	18.6	ND	47.6								
Methyl tert-butyl ether	ug/kg	8270D	27	59,400	---	<25	<25	ND											
Methylene Chloride	ug/kg	8270D	2.6	---	---	NT	NT	ND	71.9	ND	116	134	137						
Naphthalene	ug/kg	8270D	658.7	5,150	---	NT	NT	ND	ND	30.1	ND	ND	ND	ND	ND	110	ND	4,180	
n-Butylbenzene	ug/kg	8270D	---	---	---	NT	NT	ND	95.3	ND	ND	ND	ND						
n-Propylbenzene	ug/kg	8270D	---	---	---	NT	NT	ND											
p-Isopropyltoluene	ug/kg	8270D	---	---	---	NT	NT	ND											
sec-Butylbenzene	ug/kg	8270D	---	---	---	NT	NT	ND	29.2	ND	ND	ND	ND						
Styrene	ug/kg	8270D	220	---	---	NT	NT	ND											
tert-Butylbenzene	ug/kg	8270D	---	---	---	NT	NT	ND											
Tetrachloroethene	ug/kg	8270D	4.5	30,700	14,000	NT	NT	ND											
Toluene	ug/kg	8270D	1,107.20	818,000	---	<25	<25	ND	63.6	ND	165								
trans-1,2-Dichloroethene	ug/kg	8270D	58.8	211,000	---	NT	NT	ND											
trans-1,3-Dichloropropene	ug/kg	8270D	0.3	---	---	NT	NT	ND											
Trichloroethene	ug/kg	8270D	3.6	644	14,000	NT	NT	ND	73.8	ND	ND	ND	82.8						
Trichlorofluoromethane	ug/kg	8270D	---	---	---	NT	NT	ND	31.8										
Vinyl chloride	ug/kg	8270D	0.1	67	---	NT	NT	ND											
Xylenes, Total	ug/kg	8270D	3,940	258,000	4,000	<50	<50	ND	ND	<42.7	ND	ND	ND	ND	ND	153.9	ND	124.3	
Polynuclear Aromatic Hydrocarbons (PAHs)																			
1-Methylnaphthalene	ug/kg	8310	---	15,600	---	<43	<35	<370	<20	<36	<41	<170	<39	<35	NT	<390	537	<21	1,950
2-Methylnaphthalene	ug/kg	8310	---	229,000	---	<39	<31	<340	<24	<32	<37	<150	<35	<31	NT	468	678	<26	3,070
Acenaphthene	ug/kg	8310	---	3,440,000	---	<57	<45	<490	<20	<46	<53	<220	<50	<45	NT	<500	483	<21	19,300
Acenaphthylene	ug/kg	8310	---	---	---	<51	<41	<440	<14	<42	<47	<200	<45	<41	NT	<450	28.8	<15	96.6
Anthracene	ug/kg	8310	---	17,200,000	---	<14	<12	<120	<19	26.1	<14	<57	<13	<12	NT	<130	604	<20	82,200
Benzo[a]anthracene	ug/kg	8310	---	148	---	15.0	<1.4	281	60.8	82.6	18.1	198	<1.6	<1.4	NT	154	1,740	92.4	123,000
Benzo[a]pyrene	ug/kg	8310	470	15	---	11.4	<2.0	383	56.8	111	16.4	321	<2.2	<2.0	NT	<22	1,420	88.7	114,000
Benzo[b]fluoranthene	ug/kg	8310	480	148	---	56.1	<2.3	344	90.1	82.5	58.7	216	43.6	<2.3	NT	<26	2,160	132	129,000
Benzo[g,h,i]perylene	ug/kg	8310	---	---	---	<5.8	<4.7	140	<46	57.2	<5.4	112	<5.2	<4.7	NT	<51	1,010	70.1	87,500
Benzo[k]fluoranthene	ug/kg	8310	---	1,480	---	8.12	<1.6	201	<28	46.3	<1.9	109	<1.8	<1.6	NT	<18	761	<30	46,900
Chrysene	ug/kg	8310	145.1	14,800	---	14.4	11.7	287	42.0	74.3	11.9	154	<6.5	17.2	NT	337	2,250	80.4	125,000
Dibenz(a,h)anthracene	ug/kg	8310	---	15	---	<12	<9.3	<100	55.5	14.2	<11	<45	<1.0	<9.3	NT	<100	197	<37	11,600
Fluoranthene	ug/kg	8310	88,817.90	2,290	---	29.6	<1.9	1,020	.72.9	138	48.8	474	<2.1	<1.9	NT	<21	4,090	233	296,000
Fluorene	ug/kg	8310	14,814.80	2,290	---	<12	<9.3	136	<20	9.97	<11	58.2	<10	<9.3	NT	<100	417	<21	23,600
Indeno[1,2,3-cd]pyrene	ug/kg	8310	---	148	---	16.4	19.1	228	<46	7.55	40.3	137	<5.2	17.7	NT	<51	934	63.8	76,600
Naphthalene	ug/kg	8310	658.7	5,150	---	&													

Table 5
Soil Quality Test Results - 2016 Phase II ESA and Supplemental Investigation
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Parcel		Units	Method	NR 720 RCLs for GW Protection (1)	NR 720 RCLs for Direct Contact Protection (1)	Landfill Special Waste Acceptance Limit	Parcel 12		Parcel 13								Parcel 14		Parcel 15		Parcel 16
Sample							B-23	B-23	B-8	B-9	B-10	B-10	B-11	B-12	B-12	B-42	B-3	B-5	B-5	B-1	
Depth (feet)		8-12	12-16	4-8	6-7.5	0-4	8-12	0-4	8.5-10	13.5-15	2-4	6-8	1-2.5	6-7.5	3.5-5						
Depth to Groundwater (feet)		6-7	6-7	6-7	3-4	5-6	5-6	6-7	7-8	7-8	6-7	4-5	6-7	6-7	4-5						
Sampling Date		01/07/2016	01/07/2016	01/08/2016	01/07/2016	01/08/2016	01/08/2016	01/08/2016	01/08/2016	01/07/2016	01/07/2016	01/07/2016	03/08/2016	01/08/2016	01/12/2016	01/12/2016	01/12/2016	01/14/2016			
Polychlorinated Biphenyls (PCBs)																					
Aroclor-1016	ug/kg	8082A	9.4 total	3,930	50,000 total	NT	NT	<25	<23	<24	<27	<23	<26	<23	NT	NT	<1,200	<25	<2,300		
Aroclor-1221	ug/kg	8082A		159		NT	NT	<21	<19	<20	<23	<19	<22	<20	NT	NT	<980	<21	<1,900		
Aroclor-1232	ug/kg	8082A		159		NT	NT	<24	<22	<22	<26	<21	<24	<22	NT	NT	<1,100	<23	<2,100		
Aroclor-1242	ug/kg	8082A		221		NT	NT	<22	<21	<21	<24	<20	<23	<21	NT	NT	<1,000	<22	<2,000		
Aroclor-1248	ug/kg	8082A		221		NT	NT	<19	<17	<18	<20	<17	<19	<17	NT	NT	<860	<18	<1,700		
Aroclor-1254	ug/kg	8082A		221		NT	NT	<15	<14	<14	<16	<14	<15	<14	NT	NT	<690	<15	33,700		
Aroclor-1260	ug/kg	8082A		221		NT	NT	<14	<13	<13	<15	<12	<14	<13	NT	NT	3,740	73.7	13,100		
Semi-Volatile Organic Compounds (SVOCs)																					
1,2,4,5-Tetrachlorobenzene	ug/kg	8270D		23,500		---	NT	NT	ND	NT	ND	ND	ND								
1,2,4-Trichlorobenzene	ug/kg	8270D		22,000		---	NT	NT	ND	NT	ND	ND	ND								
1,2-Dichlorobenzene	ug/kg	8270D				---	NT	NT	ND	NT	ND	ND	ND								
1,3-Dichlorobenzene	ug/kg	8270D				---	NT	NT	ND	NT	ND	ND	ND								
2,4,5-Trichlorophenol	ug/kg	8270D		6,110,000		---	NT	NT	ND	NT	ND	ND	ND								
2,4,6-Trichlorophenol	ug/kg	8270D		44,100		---	NT	NT	ND	NT	ND	ND	ND								
2,4-Dichlorophenol	ug/kg	8270D				---	NT	NT	ND	NT	ND	ND	ND								
2,4-Dimethylphenol	ug/kg	8270D				---	NT	NT	ND	NT	ND	ND	ND								
2,4-Dinitrotoluene	ug/kg	8270D				---	NT	NT	ND	NT	ND	ND	ND								
2-Chloronaphthalene	ug/kg	8270D				---	NT	NT	ND	NT	ND	ND	ND								
2-Chlorophenol	ug/kg	8270D				---	NT	NT	ND	NT	ND	ND	ND								
2-Methylphenol	ug/kg	8270D				---	NT	NT	ND	NT	ND	ND	ND								
2-Nitroaniline	ug/kg	8270D				---	NT	NT	ND	NT	ND	ND	ND								
2-Nitrophenol	ug/kg	8270D				---	NT	NT	ND	NT	ND	ND	ND								
3 & 4-Methylphenol	ug/kg	8270D				---	NT	NT	ND	NT	ND	ND	ND								
3,3'-Dichlorobenzene	ug/kg	8270D				---	NT	NT	ND	NT	ND	ND	ND								
3-Nitroaniline	ug/kg	8270D				---	NT	NT	ND	NT	ND	ND	ND								
4,6-Dinitro-2-methylphenol	ug/kg	8270D				---	NT	NT	ND	NT	ND	ND	ND								
4-Bromophenyl-phenyl ether	ug/kg	8270D				---	NT	NT	ND	NT	ND	ND	ND								
4-Chloro-3-methylphenol	ug/kg	8270D				---	NT	NT	ND	NT	ND	ND	ND								
4-Chloroaniline	ug/kg	8270D				---	NT	NT	ND	NT	ND	ND	ND								
4-Chlorophenyl-phenyl ether	ug/kg	8270D				---	NT	NT	ND	NT	ND	ND	ND								
4-Nitroaniline	ug/kg	8270D				---	NT	NT	ND	NT	ND	ND	ND								
4-Nitrophenol	ug/kg	8270D				---	NT	NT	ND	NT	ND	ND	ND								
Acetophenone	ug/kg	8270D		2,520,000		---	NT	NT	ND	NT	ND	ND	ND								
Aniline	ug/kg	8270D		85,200		---	NT	NT	ND	NT	ND	ND	ND								
Azobenzene & 1,2-Diphenylhdra	ug/kg	8270D				---	NT	NT	ND	NT	ND	ND	ND								
Benzidine	ug/kg	8270D		0.3		---	NT	NT	ND	NT	ND	ND	ND								
Benzyl alcohol	ug/kg	8270D		6,110,000		---	NT	NT	ND	NT	ND	ND	ND								
Bis(2-chloroethoxy)methane	ug/kg	8270D				---	NT	NT	ND	NT	ND	ND	ND								
Bis(2-chloroethyl)ether	ug/kg	8270D		183,000		---	NT	NT	ND	NT	ND	ND	ND								
Bis(2-chloroisopropyl)ether	ug/kg	8270D		265		---	NT	NT	ND	NT	ND	ND	ND								
Bis(2-ethylhexyl)phthalate	ug/kg	8270D	2,880	34,700	</																

Table 5
Soil Quality Test Results - 2016 Phase II ESA and Supplemental Investigation
West Basin, 30th Street Corridor

Parcel							Parcel 12		Parcel 13								Parcel 14		Parcel 15		Parcel 16	
Sample	Units	Method	NR 720 RCLs for GW Protection (1)	NR 720 RCLs for Direct Contact Protection (1)	Landfill Special Waste Acceptance Limit	B-23	B-23	B-8	B-9	B-10	B-10	B-11	B-12	B-12	B-42	B-3	B-5	B-5	B-1			
Depth (feet)	Method	Units	NR 720 RCLs for GW Protection (1)	NR 720 RCLs for Direct Contact Protection (1)	Landfill Special Waste Acceptance Limit	8-12	12-16	4-8	6-7.5	0-4	8-12	0-4	8.5-10	13.5-15	2-4	6-8	1-2.5	6-7.5	3.5-5			
Depth to Groundwater (feet)						6-7	6-7	6-7	3-4	5-6	5-6	6-7	7-8	7-8	6-7	4-5	6-7	6-7	4-5			
Sampling Date						01/07/2016	01/07/2016	01/08/2016	01/07/2016	01/08/2016	01/08/2016	01/08/2016	01/07/2016	01/07/2016	03/08/2016	01/08/2016	01/12/2016	01/12/2016	01/14/2016			
Hexachlorocyclopentadiene	ug/kg	8270D			---	NT	NT	NT	ND	NT	ND	ND	ND	ND	ND							
Hexachloroethane	ug/kg	8270D			---	NT	NT	NT	ND	NT	ND	ND	ND	ND	ND							
Hexachloropropene	ug/kg	8270D		43,800	---	NT	NT	NT	ND	NT	ND	ND	ND	ND	ND							
Isophorone	ug/kg	8270D			---	NT	NT	NT	ND	NT	ND	ND	ND	ND	ND							
N-Nitroso-di-n-propylamine	ug/kg	8270D		69	---	NT	NT	NT	ND	NT	ND	ND	ND	ND	ND							
N-Nitrosodimethylamine	ug/kg	8270D		2	---	NT	NT	NT	ND	NT	ND	ND	ND	ND	ND							
N-Nitrosodiphenylamine & Diphn	ug/kg	8270D		99,100	---	NT	NT	NT	ND	NT	ND	ND	ND	ND	ND							
N-Nitrosopyrrolidine	ug/kg	8270D		231	---	NT	NT	NT	ND	NT	ND	ND	ND	ND	ND							
Nitrobenzene	ug/kg	8270D		6,920	---	NT	NT	NT	ND	NT	ND	ND	ND	ND	ND							
Pentachlorophenol	ug/kg	8270D		892	---	NT	NT	NT	ND	361	NT	NT	NT	NT	NT	NT	ND	ND	ND	ND	ND	
Phenol	ug/kg	8270D		18,300,000	---	NT	NT	NT	ND	NT	ND	ND	ND	ND	ND							
Pyridine	ug/kg	8270D		78,200	---	NT	NT	NT	ND	NT	ND	ND	ND	ND	ND							
Pesticides																						
4,4'-DDD	mg/kg	8081B	---	2.03	---	NT	NT	NT	ND	NT	ND	ND	ND	ND	ND							
4,4'-DDE	mg/kg	8081B	---	1.43	---	NT	NT	NT	ND	NT	ND	ND	ND	ND	ND							
4,4'-DDT	mg/kg	8081B	---	1.72	---	NT	NT	NT	ND	NT	ND	ND	ND	ND	ND							
Aldrin	mg/kg	8081B	---	0.029	---	NT	NT	NT	ND	NT	0.0976	0.00247	ND									
alpha-BHC	mg/kg	8081B	---	---	---	NT	NT	NT	ND	NT	ND	ND	ND	ND	ND							
alpha-Chlordane	mg/kg	8081B	---	---	---	NT	NT	NT	ND	NT	ND	ND	ND	ND	ND							
beta-BHC	mg/kg	8081B	---	---	---	NT	NT	NT	ND	NT	ND	ND	ND	ND	ND							
Chlordane	mg/kg	8081B	---	1.62	---	NT	NT	NT	ND	NT	0.00198	ND										
delta-BHC	mg/kg	8081B	---	---	---	NT	NT	NT	ND	NT	ND	ND	ND	ND	ND							
Dieldrin	mg/kg	8081B	---	0.03	---	NT	NT	NT	ND	NT	0.144	0.00358	0.746									
Endosulfan I	mg/kg	8081B	---	367	---	NT	NT	NT	ND	NT	ND	ND	ND	ND	ND							
Endosulfan II	mg/kg	8081B	---	367	---	NT	NT	NT	ND	NT	ND	ND	ND	ND	ND							
Endosulfan Sulfate	mg/kg	8081B	---	---	---	NT	NT	NT	ND	NT	ND	ND	ND	0.215								
Endrin	mg/kg	8081B	0.1616	18.3	---	NT	NT	NT	ND	NT	0.0517	0.00124	0.294									
Endrin aldehyde	mg/kg	8081B	---	---	---	NT	NT	NT	ND	NT	ND	ND	ND	ND	ND							
Endrin ketone	mg/kg	8081B	---	---	---	NT	NT	NT	ND	NT	ND	ND	ND	ND	ND							
gamma-Chlordane	mg/kg	8081B	---	---	---	NT	NT	NT	ND	NT	ND	ND	ND	ND	ND							
Heptachlor	mg/kg	8081B	0.0662	0.108	---	NT	NT	NT	ND	NT	ND	ND	ND	ND	ND							
Heptachlor epoxide	mg/kg	8081B	0.0082	0.053	---	NT	NT	NT	ND	NT	ND	ND	ND	ND	ND							
Lindane	mg/kg	8081B	0.0023	0.517	---	NT	NT	NT	ND	NT	ND	ND	0.000989	ND								
Methoxychlor	mg/kg	8081B	4.32	306	---	NT	NT	NT	ND	NT	0.0517	0.000989	0.870									
Toxaphene	mg/kg	8081B	0.928	0.442	---	NT	NT	NT	ND	NT	ND	ND	ND	ND	ND							
Herbicides																						
4,4'-DDD	ug/kg	SW8151	---	---	---	NT	NT	NT	ND	NT	NT	NT										
4,4'-DDE	ug/kg	SW8151	---	---	---	NT	NT	NT	ND	NT	NT	NT										
4,4'-DDT	ug/kg	SW8151	---	---	---	NT	NT	NT	ND	NT	NT	NT										
Aldrin	ug/kg	SW8151	155.1	1,830,000	---	NT	NT	NT	ND	NT	NT	NT										
alpha-BHC	ug/kg	SW8151	20.2	894	---	NT	NT	NT	ND													

Table 5
 Soil Quality Test Results - 2016 Phase II ESA and Supplemental Investigation
 West Basin, 30th Street Corridor

Parcel							Parcel 12		Parcel 13							Parcel 14		Parcel 15		Parcel 16
Sample	Units	Method	NR 720 RCLs for GW Protection (1)	NR 720 RCLs for Direct Contact Protection (1)	Landfill Special Waste Acceptance Limit	B-23	B-23	B-8	B-9	B-10	B-10	B-11	B-12	B-12	B-42	B-3	B-5	B-5	B-1	
Depth (feet)						8-12	12-16	4-8	6-7.5	0-4	8-12	0-4	8.5-10	13.5-15	2-4	6-8	1-2.5	6-7.5	3.5-5	
Depth to Groundwater (feet)						6-7	6-7	6-7	3-4	5-6	5-6	6-7	7-8	7-8	6-7	4-5	6-7	6-7	4-5	
Sampling Date						01/07/2016	01/07/2016	01/08/2016	01/07/2016	01/08/2016	01/08/2016	01/08/2016	01/07/2016	01/07/2016	03/08/2016	01/08/2016	01/12/2016	01/12/2016	01/14/2016	
Selenium	mg/L	EPA 6010C	---	---	1	NT	NT	0.32	NT											
Silver	mg/L	EPA 6010C	---	---	5	NT	NT	<0.0020	NT											
Zinc	mg/L	EPA 6010C	---	---	---	NT	NT	2.0	NT											
Mercury	mg/L	EPA 7470A	---	---	0.2	NT	NT	0.000081	NT											
TCLP VOCs																				
1,1-Dichloroethene	mg/L	EPA 8260C	---	---	0.7	NT	NT	<0.027	NT											
1,2-Dichloroethane	mg/L	EPA 8260C	---	---	0.5	NT	NT	<0.030	NT											
2-Butanone	mg/L	EPA 8260C	---	---	---	NT	NT	<0.40	NT											
Benzene	mg/L	EPA 8260C	---	---	0.5	NT	NT	<0.030	NT											
Carbon tetrachloride	mg/L	EPA 8260C	---	---	0.5	NT	NT	<0.030	NT											
Chlorobenzene	mg/L	EPA 8260C	---	---	100	NT	NT	<0.040	NT											
Chloroform	mg/L	EPA 8260C	---	---	6	NT	NT	<0.030	NT											
Tetrachloroethene	mg/L	EPA 8260C	---	---	0.7	NT	NT	<0.040	NT											
Trichloroethene	mg/L	EPA 8260C	---	---	0.5	NT	NT	<0.030	NT											
Vinyl chloride	mg/L	EPA 8260C	---	---	0.2	NT	NT	<0.018	NT											
TCLP Semi-Volatiles																				
1,4-Dichlorobenzene	mg/L	EPA 8270D	---	---	7.5	NT	NT	<0.017	NT											
2,4,5-Trichlorophenol	mg/L	EPA 8270D	---	---	400	NT	NT	<0.0050	NT											
2,4,6-Trichlorophenol	mg/L	EPA 8270D	---	---	2	NT	NT	<0.0012	NT											
2,4-Dinitrotoluene	mg/L	EPA 8270D	---	---	0.13	NT	NT	<0.0020	NT											
2-Methylphenol	mg/L	EPA 8270D	---	---	---	NT	NT	<0.0040	NT											
3 & 4-Methylphenol	mg/L	EPA 8270D	---	---	---	NT	NT	<0.0040	NT											
Hexachlorobenzene	mg/L	EPA 8270D	---	---	0.13	NT	NT	<0.0026	NT											
Hexachlorobutadiene	mg/L	EPA 8270D	---	---	0.5	NT	NT	<0.0022	NT											
Hexachloroethane	mg/L	EPA 8270D	---	---	3	NT	NT	<0.0020	NT											
Nitrobenzene	mg/L	EPA 8270D	---	---	2	NT	NT	<0.0022	NT											
Pentachlorophenol	mg/L	EPA 8270D	---	---	100	NT	NT	<0.0060	NT											
Pyridine	mg/L	EPA 8270D	---	---	5	NT	NT	<0.0011	NT											
Other																				
Phenolics	mg/L	EPA 9066	---	---	2,000	NT	NT	<0.0060	NT											

(1) From WDNR RCLs Worksheet dated December 2015.

*Background threshold level for Arsenic is 8 mg/kg. Concentrations below 8 mg/kg are to be considered background.

**Trivalent Chromium values given. Background concentration of Chromium is 44 mg/kg. Concentrations less than 44 mg/kg

***Background threshold level for Lead is 50 mg/kg. Concentrations below 50 mg/kg are to be considered background.

Bold = Exceeds RCL

Red = Potential Hazardous Waste

Table 5
Soil Quality Test Results - 2016 Phase II ESA and Supplemental Investigation
West Basin, 30th Street Corridor

Parcel		Parcel 16																	
Sample	Units	Method	NR 720 RCLs for GW Protection (1)	NR 720 RCLs for Direct Contact Protection (1)	Landfill Special Waste Acceptance Limit	B-2	B-4	B-4	B-6	B-6	B-7	B-7	B-24	B-24	B-25	B-26	B-26	B-26	
Depth (feet)						0-4	1-2.5	8.5-10	0-4	4-8	4-8	16-20	0-4	4-8	4-6	4-6	6-8	10-12	
Depth to Groundwater (feet)						4-5	4-5	4-5	7-8	7-8	5-6	5-6	3-4	3-4	8-9	8-9	8-9	8-9	
Sampling Date						01/11/2016	01/14/2016	01/14/2016	01/11/2016	01/11/2016	01/08/2016	01/08/2016	01/11/2016	01/11/2016	03/07/2016	03/07/2016	03/07/2016	03/07/2016	
Physical Characteristics																			
Percent Moisture	%	---	---	---	---	14.0	18.6	14.0	7.6	20.3	15.5	17.1	12.7	22.8	5.4	17.4	18.1	8.6	2.1
Percent Solids	%	---	---	---	---	86.0	81.4	86.0	92.4	79.7	84.5	82.9	87.3	77.2	94.6	82.6	81.9	91.4	97.9
Cyanide, Reactive	mg/kg	ASTM D5049	---	---	200	NT	<20	NT	NT	NT	<0.58	<0.57	NT	NT	NT	NT	NT	NT	NT
Flashpoint	Deg. F	EPA 1010	---	---	≥140	NT	>140	NT	NT										
% Chlorine	%	EPA 8260C	---	---	<1.0%	NT	<0.011	NT	NT										
pH	S.U.	EPA 9045D	---	---	2.0≤pH≤12.5	NT	8.91	NT	NT										
Free Liquids	---	EPA 9095B	---	---	0%	NT	Absent	NT	NT										
Specific Gravity	---	SM 2710F	---	---	---	NT	1.78	NT	NT										
Sulfide, Reactive	mg/kg	SW-846	---	---	200	NT	100	NT	NT										
Volatile Organic Compounds (VOCs)																			
1,1,1,2-Tetrachloroethane	ug/kg	8270D	53.3	---	---	ND	NT	NT	NT	NT	NT								
1,1,1-Trichloroethane	ug/kg	8270D	140.2	640,000	---	ND	NT	NT	NT	NT	NT								
1,1,2,2-Tetrachloroethane	ug/kg	8270D	0.2	---	---	ND	NT	NT	NT	NT	NT								
1,1,2-Trichloroethane	ug/kg	8270D	3.2	---	---	ND	NT	NT	NT	NT	NT								
1,1-Dichloroethane	ug/kg	8270D	483.6	---	---	ND	NT	NT	NT	NT	NT								
1,1-Dichloroethene	ug/kg	8270D	5	342,000	---	ND	NT	NT	NT	NT	NT								
1,1-Dichloropropene	ug/kg	8270D	---	---	---	ND	NT	NT	NT	NT	NT								
1,2,3-Trichlorobenzene	ug/kg	8270D	---	---	---	ND	NT	NT	NT	NT	NT								
1,2,3-Trichloropropane	ug/kg	8270D	52	---	---	ND	NT	NT	NT	NT	NT								
1,2,4-Trichlorobenzene	ug/kg	8270D	408	---	---	ND	44.4	ND	ND	89.2	ND	ND	ND	ND	NT	NT	NT	NT	NT
1,2,4-Trimethylbenzene	ug/kg	8270D	1379.3*	89,800	---	ND	ND	ND	ND	39.7	105	ND	ND	ND	NT	NT	NT	NT	NT
1,2-Dibromo-3-Chloropropane	ug/kg	8270D	0.2	---	---	ND	NT	NT	NT	NT	NT								
1,2-Dibromoethane	ug/kg	8270D	0.0282	47	---	ND	NT	NT	NT	NT	NT								
1,2-Dichlorobenzene	ug/kg	8270D	1,168	---	---	ND	NT	NT	NT	NT	NT								
1,2-Dichloroethane	ug/kg	8270D	2.8	608	---	ND	NT	NT	NT	NT	NT								
1,2-Dichloropropane	ug/kg	8270D	3.3	---	---	ND	NT	NT	NT	NT	NT								
1,3,5-Trimethylbenzene	ug/kg	8270D	1379.3*	182,000	---	ND	ND	ND	ND	ND	54.7	ND	ND	ND	NT	NT	NT	NT	NT
1,3-Dichlorobenzene	ug/kg	8270D	1,152.20	---	---	ND	NT	NT	NT	NT	NT								
1,3-Dichloropropane	ug/kg	8270D	---	---	---	ND	NT	NT	NT	NT	NT								
1,4-Dichlorobenzene	ug/kg	8270D	144	---	---	ND	ND	ND	ND	ND	30.0	ND	ND	ND	NT	NT	NT	NT	NT
2,2-Dichloropropane	ug/kg	8270D	---	---	---	ND	NT	NT	NT	NT	NT								
2-Chlorotoluene	ug/kg	8270D	---	---	---	ND	NT	NT	NT	NT	NT								
4-Chlorotoluene	ug/kg	8270D	---	---	---	ND	NT	NT	NT	NT	NT								
Acetone	ug/kg	8270D				223	251	ND	207	305	251	241	253	332	NT	NT	NT	NT	NT
Benzene	ug/kg	8270D	5.1	1,490	---	ND	ND	26.7	ND	ND	15.0	ND	ND	ND	NT	NT	NT	NT	NT
Bromobenzene	ug/kg	8270D	---	---	---	ND	NT	NT	NT	NT	NT								
Bromochloromethane	ug/kg	8270D	---	---	---	ND	NT	NT	NT	NT	NT								
Bromodichloromethane	ug/kg	8270D	0.3	---	---	ND	NT	NT	NT	NT	NT								
Bromoform	ug/kg	8270D	2.3	---	---	ND	NT	NT	NT	NT	NT								
Bromomethane	ug/kg	8270D	5.1	---	---	ND	NT	NT	NT	NT	NT								
Carbon tetrachloride	ug/kg	8270D	3.9	854	---	ND	NT	NT	NT	NT	NT								
Chlorobenzene	ug/kg	8270D	---	---	---	ND	NT	NT	NT	NT	NT								
Chloroethane	ug/kg	8270D	226.6	---	---	ND													

Table 5

Parcel		Parcel 16																	
Sample	Units	Method	NR 720 RCLs for GW Protection (1)	NR 720 RCLs for Direct Contact Protection (1)	Landfill Special Waste Acceptance Limit	B-2	B-4	B-4	B-6	B-6	B-7	B-7	B-24	B-24	B-25	B-26	B-26	B-26	B-28
Depth (feet)						0.4	1.2.5	8.5-10	0.4	4-8	4-8	16-20	0-4	4-8	4-6	4-6	6-8	10-12	2-4
Depth to Groundwater (feet)						4-5	4-5	4-5	7-8	7-8	5-6	5-6	3-4	3-4	8-9	8-9	8-9	8-9	8-9
Sampling Date						01/11/2016	01/14/2016	01/14/2016	01/11/2016	01/11/2016	01/08/2016	01/08/2016	01/11/2016	01/11/2016	03/07/2016	03/07/2016	03/07/2016	03/07/2016	03/08/2016
Dibromomethane	ug/kg	8270D	---	---	---	ND	NT	NT	NT	NT									
Dichlorodifluoromethane	ug/kg	8270D	3,082.50	---	---	ND	NT	NT	NT	NT									
Ethylbenzene	ug/kg	8270D	1,570	7,470	---	ND	NT	NT	NT	NT									
Hexachlorobutadiene	ug/kg	8270D	25.2	---	---	ND	NT	NT	NT	NT									
Isopropylbenzene	ug/kg	8270D	---	---	---	ND	ND	156	ND	ND	34.5	ND	ND	ND	NT	NT	NT	NT	
Methyl tert-butyl ether	ug/kg	8270D	27	59,400	---	ND	NT	NT	NT	NT									
Methylene Chloride	ug/kg	8270D	2.6	---	---	ND	150	161	ND	ND	ND	ND	ND	ND	NT	NT	NT	NT	
Naphthalene	ug/kg	8270D	658.7	5,150	---	ND	356	38.8	ND	83.5	153	ND	34.1	61.2	NT	NT	NT	NT	
n-Butylbenzene	ug/kg	8270D	---	---	---	ND	ND	ND	ND	ND	29.2	ND	ND	ND	NT	NT	NT	NT	
n-Propylbenzene	ug/kg	8270D	---	---	---	ND	ND	ND	ND	ND	42.2	ND	ND	ND	NT	NT	NT	NT	
p-Isopropyltoluene	ug/kg	8270D	---	---	---	ND	NT	NT	NT	NT									
sec-Butylbenzene	ug/kg	8270D	---	---	---	ND	NT	NT	NT	NT									
Styrene	ug/kg	8270D	220	---	---	ND	NT	NT	NT	NT									
tert-Butylbenzene	ug/kg	8270D	---	---	---	ND	NT	NT	NT	NT									
Tetrachloroethene	ug/kg	8270D	4.5	30,700	14,000	ND	ND	ND	ND	ND	44.4	ND	34.8	ND	NT	NT	NT	NT	
Toluene	ug/kg	8270D	1,107.20	818,000	---	ND	ND	ND	ND	ND	43.3	ND	ND	ND	NT	NT	NT	NT	
trans-1,2-Dichloroethene	ug/kg	8270D	58.8	211,000	---	ND	ND	18.5	ND	ND	ND	ND	ND	ND	NT	NT	NT	NT	
trans-1,3-Dichloropropene	ug/kg	8270D	0.3	---	---	ND	NT	NT	NT	NT									
Trichloroethene	ug/kg	8270D	3.6	644	14,000	ND	106	55.4	ND	ND	1,380	19.3	14.9	ND	NT	NT	NT	NT	
Trichlorofluoromethane	ug/kg	8270D	---	---	---	ND	ND	ND	ND	ND	40.2	ND	ND	NT	NT	NT	NT	NT	
Vinyl chloride	ug/kg	8270D	0.1	67	---	ND	ND	185	ND	ND	ND	ND	ND	ND	NT	NT	NT	NT	
Xylenes, Total	ug/kg	8270D	3,940	258,000	4,000	ND	44.7	ND	ND	83.5	90.3	ND	44.1	ND	NT	NT	NT	NT	
Polynuclear Aromatic Hydrocarbons (PAHs)																			
1-Methylnaphthalene	ug/kg	8310	---	15,600	---	<1,800	<1,800	<36	<180	<210	47.5	<21	<1,700	<390	NT	NT	NT	NT	
2-Methylnaphthalene	ug/kg	8310	---	229,000	---	<1,600	<1,700	<33	<230	<260	55.0	<25	<1,500	<350	NT	NT	NT	NT	
Acenaphthene	ug/kg	8310	---	3,440,000	---	2,780	<2,400	<47	<180	<210	<20	<21	<2,200	<510	NT	NT	NT	NT	
Acenaphthylene	ug/kg	8310	---	---	---	<2,000	<2,200	<42	<130	<150	<14	<14	<2,000	<460	NT	NT	NT	NT	
Anthracene	ug/kg	8310	---	17,200,000	---	2,660	2,700	<12	<170	<200	<19	<19	<570	<130	NT	NT	NT	NT	
Benzo[a]anthracene	ug/kg	8310	---	148	---	6,290	5,820	14.6	251	859	53.7	<28	355	156	NT	NT	NT	NT	
Benzo[a]pyrene	ug/kg	8310	470	15	---	4,170	4,280	<2.1	288	890	53.5	<30	727	129	NT	NT	NT	NT	
Benzo[b]fluoranthene	ug/kg	8310	480	148	---	3,480	4,260	12.1	606	1,340	80.6	<35	286	155	NT	NT	NT	NT	
Benzo[g,h,i]perylene	ug/kg	8310	---	---	---	2,070	3,090	<4.8	<440	905	<48	<48	<230	88.9	NT	NT	NT	NT	
Benzo[k]fluoranthene	ug/kg	8310	---	1,480	---	2,110	2,440	<1.7	<260	<300	<29	<29	149	74.8	NT	NT	NT	NT	
Chrysene	ug/kg	8310	145.1	14,800	---	4,000	4,210	<6.0	249	514	<26	<27	<290	<65	NT	NT	NT	NT	
Dibenz(a,h)anthracene	ug/kg	8310	---	15	---	716	813	<9.7	<330	<380	<36	<36	<460	<100	NT	NT	NT	NT	
Fluoranthene	ug/kg	8310	88,817.90	2,290	---	11,100	10,800	15.6	547	1,460	86.7	<19	812	126	NT	NT	NT	NT	
Fluorene	ug/kg	8310	14,814.80	2,290	---	1,370	<490	<9.7	<180	<210	<20	<21	<460	<100	NT	NT	NT	NT	
Indeno[1,2,3-cd]pyrene	ug/kg	8310	---	148	---	2,640	3,420	<4.8	<440	876	<48	<48	412	112	NT	NT	NT	NT	
Naphthalene	ug/kg	8310	658.7	5,150	---	<1,000	<1,000	<21	<180	<210	48.0	<21	<970	<220	NT	NT	NT	NT	
Phenanthrene	ug/kg	8310	---	---	---	7,290	8,230	<3.6	882	1,480	111	<14	521	<39	NT	NT	NT	NT	
Pyrene	ug/kg	8310	54,472.50	1,720,000	---	15,900	13,400	10.7	<230	2,310	<25	<19	864	106	NT	NT	NT	NT	
Total Resource Conservation and Recovery Act (RCRA) Metals																			
Arsenic	mg/kg	6010C	0.584*	0.614*	100	5.6	9.8	3.7	1.0	25.4	4.2	3.6	3.7	3.9	NT	NT	NT	NT	
Barium	mg/kg	6010C	164.8	15,300	2,000	92.9	149	42.5	6.9	593	34.3	89.2	43.7	72.1	NT	NT	NT	NT	
Cadmium	mg/kg	6010C	0.752	70	20	0.64	12.9	0.29	0.10	7.6	0.29	0.036	0.25	0.35	NT	NT	NT	NT	
Chromium	mg/kg	6010C	360000**	100,000**	100	13.2	68.1	15.2	4.4	<0.073	11.3	16.5	11.1	17.1	NT	NT	NT	NT	
Lead	mg/kg	6010C	27***	400***	100	47.6	18,600	142	9.8	916	13.1	8.9	24.0	92.5	NT	NT	NT	NT	
Selenium	mg/kg	6010C	0.26	391	20	<0.56	<0.42	<0.39	<0.48	<0.52	<0.44	<0.50	<0.35	<0.58	NT	NT	NT	NT	
Silver	mg/kg	6010C	0.8497	391	100	0.26	14.2	<0.093	<0.12	5.1	<0.11	<0.12	<0.84	<0.14	NT	NT	NT	NT	
Mercury	ug/kg	7471B	208	3,130	4,000	550	1,700	5.4	3.7	840	21	24	57	120	NT	NT	NT	NT	

Table 5
Soil Quality Test Results - 2016 Phase II ESA and Supplemental Investigation
West Basin, 30th Street Corridor

Parcel		Parcel 16																	
Sample	Units	Method	NR 720 RCLs for GW Protection (1)	Landfill Special Waste Acceptance Limit	B-2	B-4	B-4	B-6	B-6	B-7	B-7	B-24	B-24	B-25	B-26	B-26	B-28		
Depth (feet)					0-4	1-2.5	8.5-10	0-4	4-8	4-8	16-20	0-4	4-8	4-6	4-6	6-8	10-12	2-4	
Depth to Groundwater (feet)					4-5	4-5	4-5	7-8	7-8	5-6	5-6	3-4	3-4	8-9	8-9	8-9	8-9		
Sampling Date					01/11/2016	01/14/2016	01/14/2016	01/11/2016	01/11/2016	01/08/2016	01/08/2016	01/11/2016	01/11/2016	03/07/2016	03/07/2016	03/07/2016	03/08/2016		
Polychlorinated Biphenyls (PCBs)																			
Aroclor-1016	ug/kg	8082A	9.4 total	3,930	50,000 total	<23	<2,500	<24	<22	<2,500	<24	<24	<23	<26	<110	<480	<1,200	<110	<41
Aroclor-1221	ug/kg	8082A		159		<20	<2,100	<20	<18	<2,100	<20	<20	<19	<22	<90	<410	<1,000	<93	<35
Aroclor-1232	ug/kg	8082A		159		<22	<2,300	<23	<20	<2,400	<23	<23	<22	<24	<100	<460	<1,100	<100	<39
Aroclor-1242	ug/kg	8082A		221		<21	<2,200	<21	<19	<2,300	<21	<22	<20	<23	196	1,810	4,590	1,610	40.7
Aroclor-1248	ug/kg	8082A		221		94.7	<1,800	<18	<16	11,800	<18	<18	303	68.1	<79	<360	<910	<82	<31
Aroclor-1254	ug/kg	8082A		221		104	9,350	<14	336	23,600	<14	<14	316	59.1	1,330	5,720	8,400	1,510	263
Aroclor-1260	ug/kg	8082A		221		115	16,000	<13	460	28,700	81.9	<13	318	45.0	1,700	12,100	27,100	3,420	473
Semi-Volatile Organic Compounds (SVOCs)																			
1,2,4,5-Tetrachlorobenzene	ug/kg	8270D		23,500	---	NT	NT	NT	ND	ND	ND	NT	NT	NT	NT	NT	NT		
1,2,4-Trichlorobenzene	ug/kg	8270D		22,000	---	NT	NT	NT	ND	ND	ND	NT	NT	NT	NT	NT	NT		
1,2-Dichlorobenzene	ug/kg	8270D			---	NT	NT	NT	ND	ND	ND	NT	NT	NT	NT	NT	NT		
1,3-Dichlorobenzene	ug/kg	8270D			---	NT	NT	ND	ND	ND	ND	NT	NT	NT	NT	NT	NT		
2,4,5-Trichlorophenol	ug/kg	8270D		6,110,000	---	NT	NT	ND	ND	ND	ND	NT	NT	NT	NT	NT	NT		
2,4,6-Trichlorophenol	ug/kg	8270D		44,100	---	NT	NT	ND	ND	ND	ND	NT	NT	NT	NT	NT	NT		
2,4-Dichlorophenol	ug/kg	8270D			---	NT	NT	ND	ND	ND	ND	NT	NT	NT	NT	NT	NT		
2,4-Dimethylphenol	ug/kg	8270D			---	NT	NT	ND	ND	ND	ND	NT	NT	NT	NT	NT	NT		
2,4-Dinitrotoluene	ug/kg	8270D			---	NT	NT	ND	ND	ND	ND	NT	NT	NT	NT	NT	NT		
2-Chloronaphthalene	ug/kg	8270D			---	NT	NT	ND	ND	ND	ND	NT	NT	NT	NT	NT	NT		
2-Chlorophenol	ug/kg	8270D			---	NT	NT	ND	ND	ND	ND	NT	NT	NT	NT	NT	NT		
2-Methylphenol	ug/kg	8270D			---	NT	NT	ND	ND	ND	ND	NT	NT	NT	NT	NT	NT		
2-Nitroaniline	ug/kg	8270D			---	NT	NT	ND	ND	ND	ND	NT	NT	NT	NT	NT	NT		
2-Nitrophenol	ug/kg	8270D			---	NT	NT	ND	ND	ND	ND	NT	NT	NT	NT	NT	NT		
3 & 4-Methylphenol	ug/kg	8270D			---	NT	NT	ND	ND	ND	ND	NT	NT	NT	NT	NT	NT		
3,3'-Dichlorobenzene	ug/kg	8270D			---	NT	NT	ND	ND	ND	ND	NT	NT	NT	NT	NT	NT		
3-Nitroaniline	ug/kg	8270D			---	NT	NT	ND	ND	ND	ND	NT	NT	NT	NT	NT	NT		
4,6-Dinitro-2-methylphenol	ug/kg	8270D			---	NT	NT	ND	ND	ND	ND	NT	NT	NT	NT	NT	NT		
4-Bromophenyl-phenyl ether	ug/kg	8270D			---	NT	NT	ND	ND	ND	ND	NT	NT	NT	NT	NT	NT		
4-Chloro-3-methylphenol	ug/kg	8270D			---	NT	NT	ND	ND	ND	ND	NT	NT	NT	NT	NT	NT		
4-Chloroaniline	ug/kg	8270D			---	NT	NT	ND	ND	ND	ND	NT	NT	NT	NT	NT	NT		
4-Chlorophenyl-phenyl ether	ug/kg	8270D			---	NT	NT	ND	ND	ND	ND	NT	NT	NT	NT	NT	NT		
4-Nitroaniline	ug/kg	8270D			---	NT	NT	ND	ND	ND	ND	NT	NT	NT	NT	NT	NT		
4-Nitrophenol	ug/kg	8270D			---	NT	NT	ND	ND	ND	ND	NT	NT	NT	NT	NT	NT		
Acetophenone	ug/kg	8270D		2,520,000	---	NT	NT	NT	ND	ND	ND	NT	NT	NT	NT	NT	NT		
Aniline	ug/kg	8270D		85,200	---	NT	NT	NT	ND	ND	ND	NT	NT	NT	NT	NT	NT		
Azobenzene & 1,2-Diphenylidra	ug/kg	8270D			---	NT	NT	ND	ND	ND	ND	NT	NT	NT	NT	NT	NT		
Benzidine	ug/kg	8270D		0.3	---	NT	NT	ND	ND	ND	ND	NT	NT	NT	NT	NT	NT		
Benzyl alcohol	ug/kg	8270D		6,110,000	---	NT	NT	ND	ND	ND	ND	NT	NT	NT	NT	NT	NT		
Bis(2-chloroethoxy)methane	ug/kg	8270D			---	NT	NT	ND	ND	ND	ND	NT	NT	NT	NT	NT	NT		
Bis(2-chloroethyl)ether	ug/kg	8270D		183,000	---	NT	NT	ND	ND	ND	ND	NT	NT	NT	NT	NT	NT		
Bis(2-chloroisopropyl)ether	ug/kg	8270D		265	---	NT	NT	ND	ND	ND	ND	NT	NT	NT	NT	NT	NT		
Bis(2-ethylhexyl)phthalate	ug/kg	8270D	2,880	34,700	---	NT	NT	NT	ND	1,940	ND	ND	NT	NT	NT	NT	NT		
Carbazole	ug/kg	8270D	---	---	---	NT	NT	NT	ND	ND	ND	NT	NT	NT	NT	NT	NT		
Di-n-butylphthalate	ug/kg	8270D	---	---	---	NT	NT	NT	212	194	62.2	74.7	NT	NT	NT	NT	NT		
Di-n-octylphthalate	ug/kg	8270D	---	---	---	NT	NT	NT	ND	ND	ND	NT	NT	NT	NT	NT	NT		
Dibenzofuran	ug/kg	8270D	---	72,200	---	NT	NT	NT	ND	ND	ND	26.7	NT	NT	NT	NT	NT		
Diethylphthalate	ug/kg	8270D	---	48,900,000	---	NT	NT	NT	ND	ND	ND	NT	NT	NT	NT	NT	NT		
Dimethylphthalate	ug/kg	8270D			---	NT	NT	NT	ND	ND	ND	NT	NT						

Table 5
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West Basin, 30th Street Corridor

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Parcel		Parcel 16																	
Sample	Units	Method	NR 720 RCLs for GW Protection (1)	Landfill Special Waste Acceptance Limit	B-2	B-4	B-4	B-6	B-6	B-7	B-7	B-24	B-24	B-25	B-26	B-26	B-26	B-28	
Depth (feet)					0-4	1-2.5	8.5-10	0-4	4-8	4-8	16-20	0-4	4-8	4-6	4-6	6-8	10-12	2-4	
Depth to Groundwater (feet)					4-5	4-5	4-5	7-8	7-8	5-6	5-6	3-4	3-4	8-9	8-9	8-9	8-9	8-9	
Sampling Date					01/11/2016	01/14/2016	01/14/2016	01/11/2016	01/11/2016	01/08/2016	01/08/2016	01/11/2016	01/11/2016	03/07/2016	03/07/2016	03/07/2016	03/07/2016	03/08/2016	
Selenium	mg/L	EPA 6010C	---	---	1	NT	0.012	NT											
Silver	mg/L	EPA 6010C	---	---	5	NT	<0.0020	NT											
Zinc	mg/L	EPA 6010C	---	---	---	NT	0.17	NT											
Mercury	mg/L	EPA 7470A	---	---	0.2	NT	<0.000020	NT											
TCLP VOCs																			
1,1-Dichloroethene	mg/L	EPA 8260C	---	---	0.7	NT	<0.027	NT											
1,2-Dichloroethane	mg/L	EPA 8260C	---	---	0.5	NT	<0.030	NT											
2-Butanone	mg/L	EPA 8260C	---	---	---	NT	<0.40	NT											
Benzene	mg/L	EPA 8260C	---	---	0.5	NT	<0.030	NT											
Carbon tetrachloride	mg/L	EPA 8260C	---	---	0.5	NT	<0.030	NT											
Chlorobenzene	mg/L	EPA 8260C	---	---	100	NT	<0.040	NT											
Chloroform	mg/L	EPA 8260C	---	---	6	NT	<0.030	NT											
Tetrachloroethene	mg/L	EPA 8260C	---	---	0.7	NT	<0.040	NT											
Trichloroethene	mg/L	EPA 8260C	---	---	0.5	NT	<0.030	NT											
Vinyl chloride	mg/L	EPA 8260C	---	---	0.2	NT	<0.018	NT											
TCLP Semi-Volatiles																			
1,4-Dichlorobenzene	mg/L	EPA 8270D	---	---	7.5	NT	<0.017	NT											
2,4,5-Trichlorophenol	mg/L	EPA 8270D	---	---	400	NT	<0.0050	NT											
2,4,6-Trichlorophenol	mg/L	EPA 8270D	---	---	2	NT	<0.0012	NT											
2,4-Dinitrotoluene	mg/L	EPA 8270D	---	---	0.13	NT	<0.0020	NT											
2-Methylphenol	mg/L	EPA 8270D	---	---	---	NT	<0.0040	NT											
3 & 4-Methylphenol	mg/L	EPA 8270D	---	---	---	NT	<0.0040	NT											
Hexachlorobenzene	mg/L	EPA 8270D	---	---	0.13	NT	<0.0026	NT											
Hexachlorobutadiene	mg/L	EPA 8270D	---	---	0.5	NT	<0.0022	NT											
Hexachloroethane	mg/L	EPA 8270D	---	---	3	NT	<0.0020	NT											
Nitrobenzene	mg/L	EPA 8270D	---	---	2	NT	<0.0022	NT											
Pentachlorophenol	mg/L	EPA 8270D	---	---	100	NT	<0.0060	NT											
Pyridine	mg/L	EPA 8270D	---	---	5	NT	<0.0011	NT											
Other																			
Phenolics	mg/L	EPA 9066	---	---	2,000	NT		NT											

(1) From WDNR RCLs Worksheet dated December 2015.

*Background threshold level for Arsenic is 8 mg/kg. Concentrations below 8 mg/kg are to be considered background.

**Trivalent Chromium values given. Background concentration of Chromium is 44 mg/kg. Concentrations less than 44 mg/kg

***Background threshold level for Lead is 50 mg/kg. Concentrations below 50 mg/kg are to be considered background.

Bold = Exceeds RCL

Red = Potential Hazardous Waste

Table 5
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West Basin, 30th Street Corridor

Table 5

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West Basin, 30th Street Corridor

Parcel		Parcel 16																	
Sample	Units	Method	NR 720 RCLs for GW Protection (1)	NR 720 RCLs for Direct Contact Protection (1)	Landfill Special Waste Acceptance Limit	B-28	B-29	B-30	B-30	B-31	B-32	B-32	B-33	B-33	B-34	B-34	B-35	B-35	B-36
Depth (feet)					4-6	10-12	4-6	6-8	6-8	2-4	6-8	2-4	4-6	6-8	10-12	4-6	6-8	6-8	
Depth to Groundwater (feet)					8-9	8-9	8-9	8-9	8-9	8-9	8-9	4-5	4-5	4-5	4-5	4-5	4-5	4-5	
Sampling Date					03/08/2016	03/08/2016	03/08/2016	03/08/2016	03/08/2016	03/08/2016	03/08/2016	03/08/2016	03/08/2016	03/07/2016	03/07/2016	03/07/2016	03/07/2016		
Polychlorinated Biphenyls (PCBs)																			
Aroclor-1016	ug/kg	8082A	9.4 total	3,930	50,000 total	<23	<100	<480	<23	<120	<110	<24	<480	<23	<210	<220	<460	<110	<120
Aroclor-1221	ug/kg	8082A		159		<20	<87	<390	<20	<100	<96	<20	<410	<20	<180	<190	<390	<94	<100
Aroclor-1232	ug/kg	8082A		159		<22	<98	<440	<22	<110	<110	<22	<450	<22	<200	<210	<440	<100	<110
Aroclor-1242	ug/kg	8082A		221		<21	1,320	5,870	139	244	226	62.5	834	66.7	237	<200	1,660	<99	<110
Aroclor-1248	ug/kg	8082A		221		<17	<77	<350	<17	<89	<85	<18	<360	<18	<150	<170	<350	<83	<91
Aroclor-1254	ug/kg	8082A		221		<14	1,590	6,910	526	1,600	1,220	219	3,790	433	7,820	9,950	17,200	2,130	1,730
Aroclor-1260	ug/kg	8082A		221		<13	2,470	19,300	428	715	3,040	165	13,000	199	2,600	2,200	1,570	381	175
Semi-Volatile Organic Compounds (SVOCs)																			
1,2,4,5-Tetrachlorobenzene	ug/kg	8270D		23,500	--	NT	NT												
1,2,4-Trichlorobenzene	ug/kg	8270D		22,000	--	NT	NT												
1,2-Dichlorobenzene	ug/kg	8270D			--	NT	NT												
1,3-Dichlorobenzene	ug/kg	8270D			--	NT	NT												
2,4,5-Trichlorophenol	ug/kg	8270D		6,110,000	--	NT	NT												
2,4,6-Trichlorophenol	ug/kg	8270D		44,100	--	NT	NT												
2,4-Dichlorophenol	ug/kg	8270D			--	NT	NT												
2,4-Dimethylphenol	ug/kg	8270D			--	NT	NT												
2,4-Dinitrotoluene	ug/kg	8270D			--	NT	NT												
2-Chloronaphthalene	ug/kg	8270D			--	NT	NT												
2-Chlorophenol	ug/kg	8270D			--	NT	NT												
2-Methylphenol	ug/kg	8270D			--	NT	NT												
2-Nitroaniline	ug/kg	8270D			--	NT	NT												
2-Nitrophenol	ug/kg	8270D			--	NT	NT												
3 & 4-Methylphenol	ug/kg	8270D			--	NT	NT												
3,3'-Dichlorobenzene	ug/kg	8270D			--	NT	NT												
3-Nitroaniline	ug/kg	8270D			--	NT	NT												
4,6-Dinitro-2-methylphenol	ug/kg	8270D			--	NT	NT												
4-Bromophenyl-phenyl ether	ug/kg	8270D			--	NT	NT												
4-Chloro-3-methylphenol	ug/kg	8270D			--	NT	NT												
4-Chloroaniline	ug/kg	8270D			--	NT	NT												
4-Chlorophenyl-phenyl ether	ug/kg	8270D			--	NT	NT												
4-Nitroaniline	ug/kg	8270D			--	NT	NT												
4-Nitrophenol	ug/kg	8270D			--	NT	NT												
Acetophenone	ug/kg	8270D		2,520,000	--	NT	NT												
Aniline	ug/kg	8270D		85,200	--	NT	NT												
Azobenzene & 1,2-Diphenylhydrazine	ug/kg	8270D			--	NT	NT												
Benzidine	ug/kg	8270D		0.3	--	NT	NT												
Benzyl alcohol	ug/kg	8270D		6,110,000	--	NT	NT												
Bis(2-chloroethoxy)methane	ug/kg	8270D			--	NT	NT												
Bis(2-chloroethyl)ether	ug/kg	8270D		183,000	--	NT	NT												
Bis(2-chloroisopropyl)ether	ug/kg	8270D		265	--	NT	NT												
Bis(2-ethylhexyl)phthalate	ug/kg	8270D	2,880	34,700	--	NT	NT												
Carbazole	ug/kg	8270D	--	--	--	NT	NT												
Di-n-butylphthalate	ug/kg	8270D	--	--	--	NT	NT												
Di-n-octylphthalate	ug/kg	8270D			--	NT	NT												
Dibenzofuran	ug/kg	8270D	--	72,200	--	NT	NT	NT											

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Parcel		Parcel 16																
Sample	Units	Method	NR 720 RCLs for GW Protection (1)	Landfill Special Waste Acceptance Limit	B-28	B-29	B-30	B-30	B-31	B-32	B-32	B-33	B-33	B-34	B-34	B-35	B-35	B-36
Depth (feet)	4-6				10-12	4-6	6-8	6-8	2-4	6-8	2-4	4-6	6-8	10-12	4-6	6-8	6-8	6-8
Depth to Groundwater (feet)	8-9				8-9	8-9	8-9	8-9	8-9	8-9	4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5
Sampling Date	03/08/2016				03/08/2016	03/08/2016	03/08/2016	03/08/2016	03/08/2016	03/08/2016	03/08/2016	03/08/2016	03/08/2016	03/07/2016	03/07/2016	03/07/2016	03/07/2016	03/07/2016
Hexachlorocyclopentadiene	ug/kg	8270D			---	NT												
Hexachloroethane	ug/kg	8270D			---	NT												
Hexachloropropene	ug/kg	8270D		43,800	---	NT												
Isophorone	ug/kg	8270D			---	NT												
N-Nitroso-di-n-propylamine	ug/kg	8270D		69	---	NT												
N-Nitrosodimethylamine	ug/kg	8270D		2	---	NT												
N-Nitrosodiphenylamine & Diphn	ug/kg	8270D		99,100	---	NT												
N-Nitrosopyrrolidine	ug/kg	8270D		231	---	NT												
Nitrobenzene	ug/kg	8270D		6,920	---	NT												
Pentachlorophenol	ug/kg	8270D		892	---	NT												
Phenol	ug/kg	8270D		18,300,000	---	NT												
Pyridine	ug/kg	8270D		78,200	---	NT												
Pesticides																		
4,4'-DDD	mg/kg	8081B		---	2.03	---	NT											
4,4'-DDE	mg/kg	8081B		---	1.43	---	NT											
4,4'-DDT	mg/kg	8081B		---	1.72	---	NT											
Aldrin	mg/kg	8081B		0.029	---	NT												
alpha-BHC	mg/kg	8081B		---	---	NT												
alpha-Chlordane	mg/kg	8081B		---	---	NT												
beta-BHC	mg/kg	8081B		---	---	NT												
Chlordane	mg/kg	8081B		---	1.62	---	NT											
delta-BHC	mg/kg	8081B		---	---	NT												
Dieldrin	mg/kg	8081B		---	0.03	---	NT											
Endosulfan I	mg/kg	8081B		---	367	---	NT											
Endosulfan II	mg/kg	8081B		---	367	---	NT											
Endosulfan Sulfate	mg/kg	8081B		---	---	---	NT											
Endrin	mg/kg	8081B	0.1616	18.3	---	NT												
Endrin aldehyde	mg/kg	8081B	---	---	---	NT												
Endrin ketone	mg/kg	8081B	---	---	---	NT												
gamma-Chlordane	mg/kg	8081B	---	---	---	NT												
Heptachlor	mg/kg	8081B	0.0662	0.108	---	NT												
Heptachlor epoxide	mg/kg	8081B	0.0082	0.053	---	NT												
Lindane	mg/kg	8081B	0.0023	0.517	---	NT												
Methoxychlor	mg/kg	8081B	4.32	306	---	NT												
Toxaphene	mg/kg	8081B	0.928	0.442	---	NT												
Herbicides																		
4,4'-DDD	ug/kg	SW8151	---	---	---	NT												
4,4'-DDE	ug/kg	SW8151	---	---	---	NT												
4,4'-DDT	ug/kg	SW8151	---	---	---	NT												
Aldrin	ug/kg	SW8151	155.1	1,830,000	---	NT												
alpha-BHC	ug/kg	SW8151	20.2	894	---	NT												
alpha-Chlordane	ug/kg	SW8151	---	---	---	NT												
Total Characteristic Leaching Protocol (TCLP) RCRA Metals																		
Arsenic	mg/L	EPA 6010C	---	---	5	NT												
Barium	mg/L	EPA 6010C	---	---	100	NT												
Cadmium	mg/L	EPA 6010C	---	---	1	NT												
Chromium	mg/L	EPA 6010C	---	---	5	NT												
Copper	mg/L	EPA 6010C	---	---	---	NT	NT	NT	NT</									

Table 5
 Soil Quality Test Results - 2016 Phase II ESA and Supplemental Investigation
 West Basin, 30th Street Corridor

Parcel		Parcel 16																
Sample	Units	Method	NR 720 RCLs for GW Protection (1)	Landfill Special Waste Acceptance Limit	B-28	B-29	B-30	B-30	B-31	B-32	B-32	B-33	B-33	B-34	B-34	B-35	B-35	B-36
Depth (feet)					4-6	10-12	4-6	6-8	6-8	2-4	6-8	2-4	4-6	6-8	10-12	4-6	6-8	6-8
Depth to Groundwater (feet)					8-9	8-9	8-9	8-9	8-9	8-9	8-9	4-5	4-5	4-5	4-5	4-5	4-5	4-5
Sampling Date					03/08/2016	03/08/2016	03/08/2016	03/08/2016	03/08/2016	03/08/2016	03/08/2016	03/08/2016	03/08/2016	03/07/2016	03/07/2016	03/07/2016	03/07/2016	03/07/2016
Selenium	mg/L	EPA 6010C	---	---	1	NT												
Silver	mg/L	EPA 6010C	---	---	5	NT												
Zinc	mg/L	EPA 6010C	---	---	---	NT												
Mercury	mg/L	EPA 7470A	---	---	0.2	NT												
TCLP VOCs																		
1,1-Dichloroethene	mg/L	EPA 8260C	---	---	0.7	NT												
1,2-Dichloroethane	mg/L	EPA 8260C	---	---	0.5	NT												
2-Butanone	mg/L	EPA 8260C	---	---	---	NT												
Benzene	mg/L	EPA 8260C	---	---	0.5	NT												
Carbon tetrachloride	mg/L	EPA 8260C	---	---	0.5	NT												
Chlorobenzene	mg/L	EPA 8260C	---	---	100	NT												
Chloroform	mg/L	EPA 8260C	---	---	6	NT												
Tetrachloroethene	mg/L	EPA 8260C	---	---	0.7	NT												
Trichloroethene	mg/L	EPA 8260C	---	---	0.5	NT												
Vinyl chloride	mg/L	EPA 8260C	---	---	0.2	NT												
TCLP Semi-Volatiles																		
1,4-Dichlorobenzene	mg/L	EPA 8270D	---	---	7.5	NT												
2,4,5-Trichlorophenol	mg/L	EPA 8270D	---	---	400	NT												
2,4,6-Trichlorophenol	mg/L	EPA 8270D	---	---	2	NT												
2,4-Dinitrotoluene	mg/L	EPA 8270D	---	---	0.13	NT												
2-Methylphenol	mg/L	EPA 8270D	---	---	---	NT												
3 & 4-Methylphenol	mg/L	EPA 8270D	---	---	---	NT												
Hexachlorobenzene	mg/L	EPA 8270D	---	---	0.13	NT												
Hexachlorobutadiene	mg/L	EPA 8270D	---	---	0.5	NT												
Hexachloroethane	mg/L	EPA 8270D	---	---	3	NT												
Nitrobenzene	mg/L	EPA 8270D	---	---	2	NT												
Pentachlorophenol	mg/L	EPA 8270D	---	---	100	NT												
Pyridine	mg/L	EPA 8270D	---	---	5	NT												
Other																		
Phenolics	mg/L	EPA 9066	---	---	2,000	NT												

(1) From WDNR RCLs Worksheet dated December 2015.

*Background threshold level for Arsenic is 8 mg/kg. Concentrations below 8 mg/kg are to be considered background.

**Trivalent Chromium values given. Background concentration of Chromium is 44 mg/kg. Concentrations less than 44 mg/kg

***Background threshold level for Lead is 50 mg/kg. Concentrations below 50 mg/kg are to be considered background.

Bold = Exceeds RCL

Red = Potential Hazardous Waste

Table 5
 Soil Quality Test Results - 2016 Phase II ESA and Supplemental Investigation
 West Basin, 30th Street Corridor

Parcel		Parcel 16																	
Sample	Units	Method	NR 720 RCLs for GW Protection (1)	NR 720 RCLs for Direct Contact Protection (1)	Landfill Special Waste Acceptance Limit	B-37	B-38	B-38	B-39	B-40	B-40	B-41	B-41	B-43	B-44	B-44	B-45	B-45	B-45
Depth (feet)						4-6	2-4	6-8	6-8	2-4	4-6	2-4	4-6	2-4	4-6	6-8	2-4	6-8	8-10
Depth to Groundwater (feet)						4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	5-6	5-6	5-6	5-6	5-6	5-6
Sampling Date						03/07/2016	03/07/2016	03/07/2016	03/07/2016	03/07/2016	03/07/2016	03/07/2016	03/07/2016	03/08/2016	03/07/2016	03/07/2016	03/08/2016	03/08/2016	03/08/2016
Physical Characteristics																			
Percent Moisture	%	--	--	--	--	15.4	19.9	9.6	15.2	13.2	21.8	11.8	9.6	22.0	10.7	17.4	23.1	16.9	21.1
Percent Solids	%	--	--	--	--	84.6	80.1	90.4	84.8	86.8	78.2	88.2	90.4	78.0	89.3	82.6	76.9	83.1	78.9
Cyanide, Reactive	mg/kg	ASTM D5049	--	--	200	NT													
Flashpoint	Deg. F	EPA 1010	--	--	≥140	NT													
% Chlorine	%	EPA 8260C	--	--	<1.0%	NT													
pH	S.U.	EPA 9045D	--	--	2.0≤pH≤12.5	NT													
Free Liquids	--	EPA 9095B	--	--	0%	NT													
Specific Gravity	--	SM 2710F	--	--	--	NT													
Sulfide, Reactive	mg/kg	SW-846	--	--	200	NT													
Volatile Organic Compounds (VOCs)																			
1,1,1,2-Tetrachloroethane	ug/kg	8270D	53.3	--	--	NT	ND												
1,1,1-Trichloroethane	ug/kg	8270D	140.2	640,000	--	NT	ND												
1,1,2,2-Tetrachloroethane	ug/kg	8270D	0.2	--	--	NT	ND												
1,1,2-Trichloroethane	ug/kg	8270D	3.2	--	--	NT	ND	ND	ND	10.6	ND	ND	ND						
1,1-Dichloroethane	ug/kg	8270D	483.6	--	--	NT	ND												
1,1-Dichloroethene	ug/kg	8270D	5	342,000	--	NT	ND												
1,1-Dichloropropene	ug/kg	8270D	--	--	--	NT	ND												
1,2,3-Trichlorobenzene	ug/kg	8270D	--	--	--	NT	ND												
1,2,3-Trichloropropane	ug/kg	8270D	52	--	--	NT	ND												
1,2,4-Trichlorobenzene	ug/kg	8270D	408	--	--	NT	ND												
1,2,4-Trimethylbenzene	ug/kg	8270D	1379.3*	89,800	--	NT	ND	76.1	ND	ND	ND	ND	ND						
1,2-Dibromo-3-Chloropropane	ug/kg	8270D	0.2	--	--	NT	ND												
1,2-Dibromoethane	ug/kg	8270D	0.0282	47	--	NT	ND												
1,2-Dichlorobenzene	ug/kg	8270D	1,168	--	--	NT	ND												
1,2-Dichloroethane	ug/kg	8270D	2.8	608	--	NT	ND												
1,2-Dichloropropane	ug/kg	8270D	3.3	--	--	NT	ND												
1,3,5-Trimethylbenzene	ug/kg	8270D	1379.3*	182,000	--	NT	ND	24.6	ND	ND	ND	ND	ND						
1,3-Dichlorobenzene	ug/kg	8270D	1,152.20	--	--	NT	ND												
1,3-Dichloropropane	ug/kg	8270D	--	--	--	NT	ND												
1,4-Dichlorobenzene	ug/kg	8270D	144	--	--	NT	ND												
2,2-Dichloropropane	ug/kg	8270D	--	--	--	NT	ND												
2-Chlorotoluene	ug/kg	8270D	--	--	--	NT	ND												
4-Chlorotoluene	ug/kg	8270D	--	--	--	NT	ND												
Acetone	ug/kg	8270D				NT	ND												
Benzene	ug/kg	8270D	5.1	1,490	--	NT	ND	19.6	ND	ND	ND	ND	ND						
Bromobenzene	ug/kg	8270D	--	--	--	NT	ND												
Bromochloromethane	ug/kg	8270D	--	--	--	NT	ND												
Bromodichloromethane	ug/kg	8270D	0.3	--	--	NT	ND												
Bromoform	ug/kg	8270D	2.3	--	--	NT	ND												
Bromomethane	ug/kg	8270D	5.1	--	--	NT	ND												
Carbon tetrachloride	ug/kg	8270D	3.9	854	--	NT	ND												
Chlorobenzene	ug/kg	8270D	--	--	--	NT	ND												
Chloroethane	ug/kg	8270D	226.6	--	--	NT	NT												

Table 5
Soil Quality Test Results - 2016 Phase II ESA and Supplemental Investigation
West Basin, 30th Street Corridor

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Soil Quality Test Results - 2016 Phase II ESA and Supplemental Investigation
West Basin, 30th Street Corridor

Parcel		Parcel 16																
Sample	Units	Method	NR 720 RCLs for GW Protection (1)	NR 720 RCLs for Direct Contact Protection (1)	Landfill Special Waste Acceptance Limit	B-37	B-38	B-38	B-39	B-40	B-40	B-41	B-41	B-43	B-44	B-44	B-45	B-45
Depth (feet)						4-6	2-4	6-8	6-8	2-4	4-6	2-4	4-6	2-4	4-6	6-8	2-4	6-8
Depth to Groundwater (feet)						4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	5-6	5-6	5-6	5-6	5-6
Sampling Date						03/07/2016	03/07/2016	03/07/2016	03/07/2016	03/07/2016	03/07/2016	03/07/2016	03/07/2016	03/08/2016	03/07/2016	03/07/2016	03/08/2016	03/08/2016
Polychlorinated Biphenyls (PCBs)																		
Aroclor-1016	ug/kg	8082A	9.4 total	3,930 159 159 221 221 221 221	50,000 total	<23	<250	<220	<24	<460	<26	<450	<22	NT	NT	NT	NT	NT
Aroclor-1221	ug/kg	8082A				<20	<210	<190	<20	<390	<22	<390	<19	NT	NT	NT	NT	NT
Aroclor-1232	ug/kg	8082A				<22	<240	<210	<22	<440	<24	<430	<21	NT	NT	NT	NT	NT
Aroclor-1242	ug/kg	8082A				<21	<220	255	<21	2,090	24.4	951	<20	NT	NT	NT	NT	NT
Aroclor-1248	ug/kg	8082A				<18	<190	<170	<18	<340	<19	<340	<17	NT	NT	NT	NT	NT
Aroclor-1254	ug/kg	8082A				69.1	5,180	4,600	22.5	13,700	107	10,200	83.7	NT	NT	NT	NT	NT
Aroclor-1260	ug/kg	8082A				<13	<140	1,630	<13	\$1,100	37.3	4,240	35.2	NT	NT	NT	NT	NT
Semi-Volatile Organic Compounds (SVOCs)																		
1,2,4,5-Tetrachlorobenzene	ug/kg	8270D		23,500	--	NT												
1,2,4-Trichlorobenzene	ug/kg	8270D		22,000	--	NT												
1,2-Dichlorobenzene	ug/kg	8270D			--	NT												
1,3-Dichlorobenzene	ug/kg	8270D			--	NT												
2,4,5-Trichlorophenol	ug/kg	8270D		6,110,000	--	NT												
2,4,6-Trichlorophenol	ug/kg	8270D		44,100	--	NT												
2,4-Dichlorophenol	ug/kg	8270D			--	NT												
2,4-Dimethylphenol	ug/kg	8270D			--	NT												
2,4-Dinitrotoluene	ug/kg	8270D			--	NT												
2-Chloronaphthalene	ug/kg	8270D			--	NT												
2-Chlorophenol	ug/kg	8270D			--	NT												
2-Methylphenol	ug/kg	8270D			--	NT												
2-Nitroaniline	ug/kg	8270D			--	NT												
2-Nitrophenol	ug/kg	8270D			--	NT												
3 & 4-Methylphenol	ug/kg	8270D			--	NT												
3,3'-Dichlorobenzene	ug/kg	8270D			--	NT												
3-Nitroaniline	ug/kg	8270D			--	NT												
4,6-Dinitro-2-methylphenol	ug/kg	8270D			--	NT												
4-Bromophenyl-phenyl ether	ug/kg	8270D			--	NT												
4-Chloro-3-methylphenol	ug/kg	8270D			--	NT												
4-Chloraniline	ug/kg	8270D			--	NT												
4-Chlorophenyl-phenyl ether	ug/kg	8270D			--	NT												
4-Nitroaniline	ug/kg	8270D			--	NT												
4-Nitrophenol	ug/kg	8270D			--	NT												
Acetophenone	ug/kg	8270D		2,520,000	--	NT												
Aniline	ug/kg	8270D		85,200	--	NT												
Azobenzene & 1,2-Diphenylhydrazine	ug/kg	8270D			--	NT												
Benzidine	ug/kg	8270D		0.3	--	NT												
Benzyl alcohol	ug/kg	8270D		6,110,000	--	NT												
Bis(2-chloroethoxy)methane	ug/kg	8270D			--	NT												
Bis(2-chloroethyl)ether	ug/kg	8270D		183,000	--	NT												
Bis(2-chloroisopropyl)ether	ug/kg	8270D		265	--	NT												
Bis(2-ethylhexyl)phthalate	ug/kg	8270D	2,880	34,700	--	NT												
Carbazole	ug/kg	8270D	--	--	--	NT												
Di-n-butylphthalate	ug/kg	8270D	--	--	--	NT												
Di-n-octylphthalate	ug/kg	8270D			--	NT												

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Soil Quality Test Results - 2016 Phase II ESA and Supplemental Investigation
West Basin, 30th Street Corridor

Parcel		Parcel 16																		
Sample	Units	Method	NR 720 RCLs for GW Protection (1)	NR 720 RCLs for Direct Contact Protection (1)	Landfill Special Waste Acceptance Limit	B-37	B-38	B-38	B-39	B-40	B-40	B-41	B-41	B-43	B-44	B-44	B-44	B-45	B-45	B-45
Depth (feet)						4-6	2-4	6-8	6-8	2-4	4-6	2-4	4-6	2-4	4-6	6-8	2-4	6-8	8-10	
Depth to Groundwater (feet)						4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	5-6	5-6	5-6	5-6	5-6	5-6	
Sampling Date						03/07/2016	03/07/2016	03/07/2016	03/07/2016	03/07/2016	03/07/2016	03/07/2016	03/07/2016	03/08/2016	03/07/2016	03/07/2016	03/08/2016	03/08/2016	03/08/2016	
Hexachlorocyclopentadiene	ug/kg	8270D			---	NT														
Hexachloroethane	ug/kg	8270D			---	NT														
Hexachloropropene	ug/kg	8270D		43,800	---	NT														
Isophorone	ug/kg	8270D			---	NT														
N-Nitroso-di-n-propylamine	ug/kg	8270D		69	---	NT														
N-Nitrosodimethylamine	ug/kg	8270D		2	---	NT														
N-Nitrosodiphenylamine & Diphn	ug/kg	8270D		99,100	---	NT														
N-Nitrosopyrrolidine	ug/kg	8270D		231	---	NT														
Nitrobenzene	ug/kg	8270D		6,920	---	NT														
Pentachlorophenol	ug/kg	8270D		892	---	NT														
Phenol	ug/kg	8270D		18,300,000	---	NT														
Pyridine	ug/kg	8270D		78,200	---	NT														
Pesticides																				
4,4'-DDD	mg/kg	8081B	---	2.03	---	NT														
4,4'-DDE	mg/kg	8081B	---	1.43	---	NT														
4,4'-DDT	mg/kg	8081B	---	1.72	---	NT														
Aldrin	mg/kg	8081B	---	0.029	---	NT														
alpha-BHC	mg/kg	8081B	---	---	---	NT														
alpha-Chlordane	mg/kg	8081B	---	---	---	NT														
beta-BHC	mg/kg	8081B	---	---	---	NT														
Chlordane	mg/kg	8081B	---	1.62	---	NT														
delta-BHC	mg/kg	8081B	---	---	---	NT														
Dieldrin	mg/kg	8081B	---	0.03	---	NT														
Endosulfan I	mg/kg	8081B	---	367	---	NT														
Endosulfan II	mg/kg	8081B	---	367	---	NT														
Endosulfan Sulfate	mg/kg	8081B	---	---	---	NT														
Endrin	mg/kg	8081B	0.1616	18.3	---	NT														
Endrin aldehyde	mg/kg	8081B	---	---	---	NT														
Endrin ketone	mg/kg	8081B	---	---	---	NT														
gamma-Chlordane	mg/kg	8081B	---	---	---	NT														
Heptachlor	mg/kg	8081B	0.0662	0.108	---	NT														
Heptachlor epoxide	mg/kg	8081B	0.0082	0.053	---	NT														
Lindane	mg/kg	8081B	0.0023	0.517	---	NT														
Methoxychlor	mg/kg	8081B	4.32	306	---	NT														
Toxaphene	mg/kg	8081B	0.928	0.442	---	NT														
Herbicides																				
4,4'-DDD	ug/kg	SW8151	---	---	---	NT														
4,4'-DDE	ug/kg	SW8151	---	---	---	NT														
4,4'-DDT	ug/kg	SW8151	---	---	---	NT														
Aldrin	ug/kg	SW8151	155.1	1,830,000	---	NT														
alpha-BHC	ug/kg	SW8151	20.2	894	---	NT														
alpha-Chlordane	ug/kg	SW8151	---	---	---	NT														
Total Characteristic Leaching Protocol (TCLP) RCRA Metals																				
Arsenic	mg/L	EPA 6010C	---	---	5	NT														
Barium	mg/L	EPA 6010C	---	---	100	NT	NT	NT												

Table 5
 Soil Quality Test Results - 2016 Phase II ESA and Supplemental Investigation
 West Basin, 30th Street Corridor

Parcel		Parcel 16																	
Sample	Units	Method	NR 720 RCLs for GW Protection (1)	NR 720 RCLs for Direct Contact Protection (1)	Landfill Special Waste Acceptance Limit	B-37	B-38	B-38	B-39	B-40	B-40	B-41	B-41	B-43	B-44	B-44	B-44	B-45	B-45
Depth (feet)						4-6	2-4	6-8	6-8	2-4	4-6	2-4	4-6	2-4	4-6	6-8	2-4	6-8	8-10
Depth to Groundwater (feet)						4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	5-6	5-6	5-6	5-6	5-6	5-6
Sampling Date						03/07/2016	03/07/2016	03/07/2016	03/07/2016	03/07/2016	03/07/2016	03/07/2016	03/07/2016	03/08/2016	03/07/2016	03/07/2016	03/08/2016	03/08/2016	03/08/2016
Selenium	mg/L	EPA 6010C	---	---	1	NT													
Silver	mg/L	EPA 6010C	---	---	5	NT													
Zinc	mg/L	EPA 6010C	---	---	---	NT													
Mercury	mg/L	EPA 7470A	---	---	0.2	NT													
TCLP VOCs																			
1,1-Dichloroethene	mg/L	EPA 8260C	---	---	0.7	NT													
1,2-Dichloroethane	mg/L	EPA 8260C	---	---	0.5	NT													
2-Butanone	mg/L	EPA 8260C	---	---	---	NT													
Benzene	mg/L	EPA 8260C	---	---	0.5	NT													
Carbon tetrachloride	mg/L	EPA 8260C	---	---	0.5	NT													
Chlorobenzene	mg/L	EPA 8260C	---	---	100	NT													
Chloroform	mg/L	EPA 8260C	---	---	6	NT													
Tetrachloroethene	mg/L	EPA 8260C	---	---	0.7	NT													
Trichloroethene	mg/L	EPA 8260C	---	---	0.5	NT													
Vinyl chloride	mg/L	EPA 8260C	---	---	0.2	NT													
TCLP Semi-Volatiles																			
1,4-Dichlorobenzene	mg/L	EPA 8270D	---	---	7.5	NT													
2,4,5-Trichlorophenol	mg/L	EPA 8270D	---	---	400	NT													
2,4,6-Trichlorophenol	mg/L	EPA 8270D	---	---	2	NT													
2,4-Dinitrotoluene	mg/L	EPA 8270D	---	---	0.13	NT													
2-Methylphenol	mg/L	EPA 8270D	---	---	---	NT													
3 & 4-Methylphenol	mg/L	EPA 8270D	---	---	---	NT													
Hexachlorobenzene	mg/L	EPA 8270D	---	---	0.13	NT													
Hexachlorobutadiene	mg/L	EPA 8270D	---	---	0.5	NT													
Hexachloroethane	mg/L	EPA 8270D	---	---	3	NT													
Nitrobenzene	mg/L	EPA 8270D	---	---	2	NT													
Pentachlorophenol	mg/L	EPA 8270D	---	---	100	NT													
Pyridine	mg/L	EPA 8270D	---	---	5	NT													
Other																			
Phenolics	mg/L	EPA 9066	---	---	2,000	NT													

(1) From WDNR RCLs Worksheet dated December 2015.

*Background threshold level for Arsenic is 8 mg/kg. Concentrations below 8 mg/kg are to be considered background.

**Trivalent Chromium values given. Background concentration of Chromium is 44 mg/kg. Concentrations less than 44 mg/kg

***Background threshold level for Lead is 50 mg/kg. Concentrations below 50 mg/kg are to be considered background.

Bold = Exceeds RCL

Red = Potential Hazardous Waste

TABLE 6
Groundwater Quality Test Results - 2016 Phase II ESA and Supplemental Investigation
West Basin, 30th Street Corridor

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West Basin, 30th Street Corridor

Well	Units	NR 140 Preventive Action Limits	NR 140 Enforcement Standards	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10	MW-11
				01/20/2016	01/20/2016	01/22/2016	01/20/2016	01/20/2016	01/20/2016	01/20/2016	01/22/2016	01/21/2016	01/21/2016	01/20/2016
Parameter	Date													
1,4-Dichlorobenzene	ug/L	15	75	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
2,2-Dichloropropane	ug/L	---	---	<0.70	<0.70	<0.70	<0.70	<0.70	<0.70	<0.70	<0.70	<0.70	<0.70	<0.70
2-Butanone	ug/L	---	---	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
2-Chlorotoluene	ug/L	---	---	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
2-Hexanone	ug/L	---	---	<9.0	<9.0	<9.0	<9.0	<9.0	<9.0	<9.0	<9.0	<9.0	<9.0	<9.0
4-Chlorotoluene	ug/L	---	---	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
4-Methyl-2-pentanone	ug/L	---	---	9.8	<7.0	<7.0	15	<7.0	<7.0	<7.0	<7.0	<7.0	<7.0	<7.0
Acetone	ug/L	1,800	9,000	25	<7.0	<7.0	43	<7.0	<7.0	<7.0	<7.0	67	<7.0	<7.0
Benzene	ug/L	0.5	5	<0.30	<0.30	<0.30	3.2	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Bromobenzene	ug/L	---	---	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
Bromochloromethane	ug/L	---	---	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
Bromodichloromethane	ug/L	0.06	0.6	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Bromofluorobenzene	% Recovery	---	---	104	104	103	107	109	101	100	100	104	100	103
Bromoform	ug/L	0.44	4.4	<0.29	<0.29	<0.29	<0.29	<0.29	<0.29	<0.29	<0.29	<0.29	<0.29	<0.29
Bromomethane	ug/L	1	10	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1
Carbon disulfide	ug/L	200	1,000	<0.50	<0.50	<0.50	0.76	<0.50	<0.50	<0.50	<0.50	0.57	<0.50	<0.50
Carbon tetrachloride	ug/L	0.5	5	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Chlorobenzene	ug/L	---	---	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
Chloroethane	ug/L	80	400	<0.80	<0.80	<0.80	<0.80	<0.80	<0.80	<0.80	<0.80	<0.80	<0.80	<0.80
Chloroform	ug/L	0.6	6	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Chloromethane	ug/L	3	30	<0.80	<0.80	<0.80	<0.80	<0.80	<0.80	<0.80	<0.80	<0.80	<0.80	<0.80
cis-1,2-Dichloroethene	ug/L	7	70	<0.30	<0.30	<0.30	450	<0.30	<0.30	0.35	<0.30	<0.30	0.65	0.46
cis-1,3-Dichloropropene	ug/L	0.04	0.4	<0.29	<0.29	<0.29	<0.29	<0.29	<0.29	<0.29	<0.29	<0.29	<0.29	<0.29
d8-Toluene	% Recovery	---	---	93	93	99	95	96	97	97	96	97	94	95
Dibromochloromethane	ug/L	6	60	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
Dibromofluoromethane	% Recovery	---	---	92	88	95	90	88	93	94	91	95	91	91
Dibromomethane	ug/L	---	---	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Dichlorodifluoromethane	ug/L	200	1,000	<0.80	1	<0.80	<0.80	<0.80	<0.80	<0.80	<0.80	<0.80	<0.80	<0.80
Diisopropyl ether	ug/L	---	---	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Ethylbenzene	ug/L	140	700	0.98	<0.30	<0.30	2.2	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Hexachlorobutadiene	ug/L	---	---	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
Isopropylbenzene	ug/L	---	---	<0.40	<0.40	<0.40	0.99	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
Methyl tert-butyl ether	ug/L	12	60	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
Methylene chloride	ug/L	0.5	5	<0.30	<0.30	<0.30	0.41	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Naphthalene	ug/L	10	100	1.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
n-Butylbenzene	ug/L	---	---	<0.40	<0.40	<0.40	0.65	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
n-Propylbenzene	ug/L	---	---	<0.40	<0.40	<0.40	1	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
m & p-Xylene	ug/L	400	2,000	1.0	<0.70	<0.70	2.9	<0.70	<0.70	<0.70	<0.70	<0.70	<0.70	<0.70
o-Xylene	ug/L			0.73	<0.30	<0.30	1.1	<0.30	<0.30	<0.30	<0.30	0.5	<0.30	<0.30

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Well	Units	NR 140 Preventive Action Limits	NR 140 Enforcement Standards	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10	MW-11
Parameter	Date			01/20/2016	01/20/2016	01/22/2016	01/20/2016	01/20/2016	01/20/2016	01/20/2016	01/22/2016	01/21/2016	01/21/2016	01/20/2016
beta-BHC	ug/L	---	---	NT										
Chlordane (Technical)	ug/L	0.2	2	NT										
delta-BHC	ug/L	---	---	NT										
Dieldrin	ug/L	---	---	NT										
Endosulfan I	ug/L	---	---	NT										
Endosulfan II	ug/L	---	---	NT										
Endosulfan sulfate	ug/L	---	---	NT										
Endrin	ug/L	0.4	2	NT										
Endrin aldehyde	ug/L	---	---	NT										
Endrin ketone	ug/L	---	---	NT										
gamma-Chlordane	ug/L	---	---	NT										
Heptachlor	ug/L	0.04	0.4	NT										
Heptachlor epoxide	ug/L	0.02	0.2	NT										
Lindane	ug/L	0.02	0.2	NT										
Methoxychlor	ug/L	4	40	NT										
Toxaphene	ug/L	0.3	3	NT										

Italics = Exceeds NR 140 Preventative Action Limits (PAL)

Bold = Exceeds NR 140 Enforcement Limits (ES)

--- No Established Standards

TMBs combined compared to standards.

TABLE 6
 Groundwater Quality Test Results - 2016 Phase II ESA and Supplemental Investigation
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Well	Units	NR 140 Preventive Action Limits	NR 140 Enforcement Standards	MW-12	MW-13	MW-13	MW-14	MW-15	MW-16	MW-17	MW-18	MW-19	MW-20	MW-21	MW-22	MW-23	
Parameter	Date			01/21/2016	01/21/2016	03/23/2016	01/21/2016	01/21/2016	01/21/2016	01/21/2016	---	---	01/21/2016	---	---	01/21/2016	
Resource Conservation and Recovery Act Metals																	
Dissolved Arsenic	ug/L	1	10	0.87	0.98	NT	1.2	<0.50	<0.50	6.3	Plugged	DRY	11.3	DRY	DRY	0.63	
Dissolved Barium	ug/L	400	2000	95.9	31.8	NT	175	204	586	223	Plugged	DRY	99.7	DRY	DRY	96.7	
Dissolved Cadmium	ug/L	0.5	5	<0.26	<0.26	NT	<0.26	0.29	<0.26	<0.26	Plugged	DRY	<0.26	DRY	DRY	<0.26	
Dissolved Chromium	ug/L	10	100	<1.0	1.7	NT	<1.0	<1.0	<1.0	1.2	Plugged	DRY	<1.0	DRY	DRY	1.1	
Dissolved Lead	ug/L	1.5	15	2.0	3.7	NT	1.7	2.4	5.5	12.2	Plugged	DRY	<1.5	DRY	DRY	<1.5	
Dissolved Selenium	ug/L	10	50	16.1	<12	NT	17.6	<12	<12	<12	Plugged	DRY	31.8	DRY	DRY	22.7	
Dissolved Silver	ug/L	10	50	<2.0	<2.0	NT	<2.0	<2.0	<2.0	<2.0	Plugged	DRY	<2.0	DRY	DRY	<2.0	
Dissolved Mercury	ug/L	0.2	2	0.12	0.13	NT	0.12	0.15	0.12	0.12	Plugged	DRY	0.13	DRY	DRY	0.12	
Polychlorinated Biphenyls (PCBs)																	
Aroclor-1016	ug/L	0.03	0.3	<0.21	NT	NT	NT	NT	NT	NT	Plugged	DRY	NT	DRY	DRY	NT	
Aroclor-1221	ug/L			<0.19	NT	NT	NT	NT	NT	NT	Plugged	DRY	NT	DRY	DRY	NT	
Aroclor-1232	ug/L			<0.16	NT	NT	NT	NT	NT	NT	Plugged	DRY	NT	DRY	DRY	NT	
Aroclor-1242	ug/L			<0.20	NT	NT	NT	NT	NT	NT	Plugged	DRY	NT	DRY	DRY	NT	
Aroclor-1248	ug/L			<0.28	NT	NT	NT	NT	NT	NT	Plugged	DRY	NT	DRY	DRY	NT	
Aroclor-1254	ug/L			<0.20	NT	NT	NT	NT	NT	NT	Plugged	DRY	NT	DRY	DRY	NT	
Aroclor-1260	ug/L			<0.10	NT	NT	NT	NT	NT	NT	Plugged	DRY	NT	DRY	DRY	NT	
Volatile Organic Compounds (VOCs)																	
1,1,1,2-Tetrachloroethane	ug/L	7	70	<0.40	<0.40	NT	<0.40	<0.40	<0.40	<0.40	Plugged	DRY	<8.0	DRY	DRY	<0.40	
1,1,1-Trichloroethane	ug/L	40	200	<0.30	<0.30	NT	<0.30	<0.30	<0.30	<0.30	Plugged	DRY	<6.0	DRY	DRY	<0.30	
1,1,2,2-Tetrachloroethane	ug/L	0.02	0.2	<0.40	<0.40	NT	<0.40	<0.40	<0.40	<0.40	Plugged	DRY	<8.0	DRY	DRY	<0.40	
1,1,2-Trichloroethane	ug/L	0.5	5	<0.30	<0.30	NT	<0.30	<0.30	<0.30	<0.30	Plugged	DRY	<6.0	DRY	DRY	<0.30	
1,1-Dichloroethane	ug/L	85	850	<0.40	<0.40	NT	<0.40	<0.40	<0.40	<0.40	Plugged	DRY	<8.0	DRY	DRY	<0.40	
1,1-Dichloroethene	ug/L	0.7	7	<0.27	<0.27	NT	<0.27	<0.27	<0.27	<0.27	Plugged	DRY	<5.4	DRY	DRY	<0.27	
1,1-Dichloropropene	ug/L	---	---	<0.40	<0.40	NT	<0.40	<0.40	<0.40	<0.40	Plugged	DRY	<8.0	DRY	DRY	<0.40	
1,2,3-Trichlorobenzene	ug/L	---	---	<0.40	<0.40	NT	<0.40	<0.40	<0.40	<0.40	Plugged	DRY	<8.0	DRY	DRY	<0.40	
1,2,3-Trichloropropane	ug/L	---	---	<0.40	<0.40	NT	<0.40	<0.40	<0.40	<0.40	Plugged	DRY	<8.0	DRY	DRY	<0.40	
1,2,4-Trichlorobenzene	ug/L	14	70	<0.40	<0.40	NT	<0.40	<0.40	<0.40	<0.40	Plugged	DRY	<8.0	DRY	DRY	<0.40	
1,2,4-Trimethylbenzene	ug/L	96	480	<0.30	<0.30	NT	<0.30	<0.30	<0.30	<0.30	Plugged	DRY	12	DRY	DRY	<0.30	
1,3,5-Trimethylbenzene	ug/L			<0.30	<0.30	NT	<0.30	<0.30	<0.30	<0.30	Plugged	DRY	27	DRY	DRY	<0.30	
1,2-Dibromo-3-chloropropane	ug/L	0.02	0.2	<0.40	<0.40	NT	<0.40	<0.40	<0.40	<0.40	Plugged	DRY	<8.0	DRY	DRY	<0.40	
1,2-Dibromoethane	ug/L	0.005	0.05	<0.40	<0.40	NT	<0.40	<0.40	<0.40	<0.40	Plugged	DRY	<8.0	DRY	DRY	<0.40	
1,2-Dichlorobenzene	ug/L	60	600	<0.40	<0.40	NT	<0.40	<0.40	<0.40	<0.40	Plugged	DRY	<8.0	DRY	DRY	<0.40	
1,2-Dichloroethane	ug/L	0.5	5	<0.30	<0.30	NT	<0.30	<0.30	<0.30	1.1	<0.30	Plugged	DRY	<6.0	DRY	DRY	<0.30
1,2-Dichloropropane	ug/L	0.5	5	<0.28	<0.28	NT	<0.28	<0.28	<0.28	<0.28	Plugged	DRY	<5.6	DRY	DRY	<0.28	
1,3-Dichlorobenzene	ug/L	120	600	<0.30	<0.30	NT	<0.30	<0.30	<0.30	<0.30	Plugged	DRY	<6.0	DRY	DRY	<0.30	
1,3-Dichloropropane	ug/L	---	---	<0.29	<0.29	NT	<0.29	<0.29	<0.29	<0.29	Plugged	DRY	<5.8	DRY	DRY	<0.29	

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				01/21/2016	01/21/2016	03/23/2016	01/21/2016	01/21/2016	01/21/2016	01/21/2016	---	---	01/21/2016	---	01/21/2016	
1,4-Dichlorobenzene	ug/L	15	75	<0.30	<0.30	NT	<0.30	<0.30	<0.30	<0.30	Plugged	DRY	<6.0	DRY	DRY	<0.30
2,2-Dichloropropane	ug/L	---	---	<0.70	<0.70	NT	<0.70	<0.70	<0.70	<0.70	Plugged	DRY	<14	DRY	DRY	<0.70
2-Butanone	ug/L	---	---	<4.0	<4.0	NT	<4.0	<4.0	<4.0	<4.0	Plugged	DRY	<80	DRY	DRY	<4.0
2-Chlorotoluene	ug/L	---	---	<0.40	<0.40	NT	<0.40	<0.40	<0.40	<0.40	Plugged	DRY	<8.0	DRY	DRY	<0.40
2-Hexanone	ug/L	---	---	<9.0	<9.0	NT	<9.0	<9.0	<9.0	<9.0	Plugged	DRY	<180	DRY	DRY	<9.0
4-Chlorotoluene	ug/L	---	---	<0.40	<0.40	NT	<0.40	<0.40	<0.40	<0.40	Plugged	DRY	<8.0	DRY	DRY	<0.40
4-Methyl-2-pentanone	ug/L	---	---	<7.0	<7.0	NT	<7.0	<7.0	<7.0	<7.0	Plugged	DRY	<140	DRY	DRY	<7.0
Acetone	ug/L	1,800	9,000	<7.0	320	NT	<7.0	<7.0	<7.0	7.1	Plugged	DRY	<140	DRY	DRY	<7.0
Benzene	ug/L	0.5	5	<0.30	<0.30	NT	<0.30	<0.30	29	<0.30	Plugged	DRY	<6.0	DRY	DRY	<0.30
Bromobenzene	ug/L	---	---	<0.40	<0.40	NT	<0.40	<0.40	<0.40	<0.40	Plugged	DRY	<8.0	DRY	DRY	<0.40
Bromochloromethane	ug/L	---	---	<0.40	<0.40	NT	<0.40	<0.40	<0.40	<0.40	Plugged	DRY	<8.0	DRY	DRY	<0.40
Bromodichloromethane	ug/L	0.06	0.6	<0.30	<0.30	NT	<0.30	<0.30	<0.30	<0.30	Plugged	DRY	<6.0	DRY	DRY	<0.30
Bromofluorobenzene	% Recovery	---	---	103	106	NT	101	103	98	102	Plugged	DRY	103	DRY	DRY	108
Bromoform	ug/L	0.44	4.4	<0.29	<0.29	NT	<0.29	<0.29	<0.29	<0.29	Plugged	DRY	<5.8	DRY	DRY	<0.29
Bromomethane	ug/L	1	10	<1.1	<1.1	NT	<1.1	<1.1	<1.1	<1.1	Plugged	DRY	<22	DRY	DRY	<1.1
Carbon disulfide	ug/L	200	1,000	<0.50	0.59	NT	<0.50	<0.50	<0.50	<0.50	Plugged	DRY	<10	DRY	DRY	<0.50
Carbon tetrachloride	ug/L	0.5	5	<0.30	<0.30	NT	<0.30	<0.30	<0.30	<0.30	Plugged	DRY	<6.0	DRY	DRY	<0.30
Chlorobenzene	ug/L	---	---	<0.40	<0.40	NT	<0.40	<0.40	<0.40	<0.40	Plugged	DRY	<8.0	DRY	DRY	<0.40
Chloroethane	ug/L	80	400	<0.80	<0.80	NT	<0.80	<0.80	<0.80	<0.80	Plugged	DRY	<16	DRY	DRY	<0.80
Chloroform	ug/L	0.6	6	<0.30	<0.30	NT	<0.30	<0.30	<0.30	<0.30	Plugged	DRY	7.2	DRY	DRY	<0.30
Chloromethane	ug/L	3	30	<0.80	<0.80	NT	<0.80	<0.80	<0.80	<0.80	Plugged	DRY	<16	DRY	DRY	<0.80
cis-1,2-Dichloroethene	ug/L	7	70	1.4	<0.30	NT	<0.30	<0.30	<0.30	<0.30	Plugged	DRY	<6.0	DRY	DRY	<0.30
cis-1,3-Dichloropropene	ug/L	0.04	0.4	<0.29	<0.29	NT	<0.29	<0.29	<0.29	<0.29	Plugged	DRY	<5.8	DRY	DRY	<0.29
d8-Toluene	% Recovery	---	---	95	96	NT	95	95	96	96	Plugged	DRY	95	DRY	DRY	96
Dibromochloromethane	ug/L	6	60	<0.40	<0.40	NT	<0.40	<0.40	<0.40	<0.40	Plugged	DRY	<8.0	DRY	DRY	<0.40
Dibromofluoromethane	% Recovery	---	---	91	94	NT	91	91	92	94	Plugged	DRY	85	DRY	DRY	88
Dibromomethane	ug/L	---	---	<0.30	<0.30	NT	<0.30	<0.30	<0.30	<0.30	Plugged	DRY	<6.0	DRY	DRY	<0.30
Dichlorodifluoromethane	ug/L	200	1,000	<0.80	<0.80	NT	<0.80	<0.80	<0.80	<0.80	Plugged	DRY	<16	DRY	DRY	<0.80
Diisopropyl ether	ug/L	---	---	<0.30	<0.30	NT	<0.30	<0.30	<0.30	<0.30	Plugged	DRY	<6.0	DRY	DRY	<0.30
Ethylbenzene	ug/L	140	700	<0.30	<0.30	NT	<0.30	<0.30	0.37	<0.30	Plugged	DRY	22	DRY	DRY	<0.30
Hexachlorobutadiene	ug/L	---	---	<0.40	<0.40	NT	<0.40	<0.40	<0.40	<0.40	Plugged	DRY	<8.0	DRY	DRY	<0.40
Isopropylbenzene	ug/L	---	---	<0.40	<0.40	NT	<0.40	<0.40	9.4	<0.40	Plugged	DRY	67	DRY	DRY	<0.40
Methyl tert-butyl ether	ug/L	12	60	<0.40	<0.40	NT	<0.40	<0.40	0.98	<0.40	Plugged	DRY	<8.0	DRY	DRY	<0.40
Methylene chloride	ug/L	0.5	5	<0.30	<0.30	NT	<0.30	<0.30	<0.30	<0.30	Plugged	DRY	26	DRY	DRY	<0.30
Naphthalene	ug/L	10	100	<1.0	<1.0	NT	<1.0	<1.0	<1.0	<1.0	Plugged	DRY	<20	DRY	DRY	<1.0
n-Butylbenzene	ug/L	---	---	<0.40	<0.40	NT	<0.40	<0.40	4.3	<0.40	Plugged	DRY	97	DRY	DRY	<0.40
n-Propylbenzene	ug/L	---	---	<0.40	<0.40	NT	<0.40	<0.40	14	<0.40	Plugged	DRY	240	DRY	DRY	<0.40
m & p-Xylene	ug/L	400	2,000	<0.70	<0.70	NT	<0.70	<0.70	1.1	<0.70	Plugged	DRY	<14	DRY	DRY	<0.70
o-Xylene	ug/L			<0.30	<0.30	NT	<0.30	<0.30	<0.30	<0.30	Plugged	DRY	<6.0	DRY	DRY	<0.30

TABLE 6
Groundwater Quality Test Results - 2016 Phase II ESA and Supplemental Investigation
West Basin, 30th Street Corridor

TABLE 6
 Groundwater Quality Test Results - 2016 Phase II ESA and Supplemental Investigation
 West Basin, 30th Street Corridor

Well	Units	NR 140 Preventive Action Limits	NR 140 Enforcement Standards	MW-12	MW-13	MW-13	MW-14	MW-15	MW-16	MW-17	MW-18	MW-19	MW-20	MW-21	MW-22	MW-23	
				01/21/2016	01/21/2016	03/23/2016	01/21/2016	01/21/2016	01/21/2016	01/21/2016	01/21/2016	---	---	01/21/2016	---	01/21/2016	
beta-BHC	ug/L	---	---	NT	NT	<0.0052	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Chlordane (Technical)	ug/L	0.2	2	NT	NT	<0.11	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
delta-BHC	ug/L	---	---	NT	NT	<0.0052	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Dieldrin	ug/L	---	---	NT	NT	0.045	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Endosulfan I	ug/L	---	---	NT	NT	<0.0031	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Endosulfan II	ug/L	---	---	NT	NT	<0.0021	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Endosulfan sulfate	ug/L	---	---	NT	NT	<0.0041	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Endrin	ug/L	0.4	2	NT	NT	0.013	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Endrin aldehyde	ug/L	---	---	NT	NT	<0.0041	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Endrin ketone	ug/L	---	---	NT	NT	<0.0021	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
gamma-Chlordane	ug/L	---	---	NT	NT	<0.013	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Heptachlor	ug/L	0.04	0.4	NT	NT	<0.0062	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Heptachlor epoxide	ug/L	0.02	0.2	NT	NT	0.0082	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Lindane	ug/L	0.02	0.2	NT	NT	<0.0041	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Methoxychlor	ug/L	4	40	NT	NT	0.020	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Toxaphene	ug/L	0.3	3	NT	NT	<0.062	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT

Italics = Exceeds NR 140 Preventative Action Limits (PAL)

Bold = Exceeds NR 140 Enforcement Limits (ES)

--- No Established Standards

TMBs combined compared to standards.

TABLE 6
Groundwater Quality Test Results - 2016 Phase II ESA and Supplemental Investigation
West Basin, 30th Street Corridor

Well	Units	NR 140 Preventive Action Limits	NR 140 Enforcement Standards	MW-24
Parameter	Date	01/20/2016		
Resource Conservation and Recovery Act Metals				
Dissolved Arsenic	ug/L	1	10	1.8
Dissolved Barium	ug/L	400	2000	107
Dissolved Cadmium	ug/L	0.5	5	0.36
Dissolved Chromium	ug/L	10	100	<1.0
Dissolved Lead	ug/L	1.5	15	<1.5
Dissolved Selenium	ug/L	10	50	24.8
Dissolved Silver	ug/L	10	50	<2.0
Dissolved Mercury	ug/L	0.2	2	0.15
Polychlorinated Biphenyls (PCBs)				
Aroclor-1016	ug/L	0.03	0.3	<0.22
Aroclor-1221	ug/L			<0.20
Aroclor-1232	ug/L			<0.16
Aroclor-1242	ug/L			<0.21
Aroclor-1248	ug/L			<0.29
Aroclor-1254	ug/L			<0.21
Aroclor-1260	ug/L			<0.10
Volatile Organic Compounds (VOCs)				
1,1,1,2-Tetrachloroethane	ug/L	7	70	<0.40
1,1,1-Trichloroethane	ug/L	40	200	<0.30
1,1,2,2-Tetrachloroethane	ug/L	0.02	0.2	<0.40
1,1,2-Trichloroethane	ug/L	0.5	5	<0.30
1,1-Dichloroethane	ug/L	85	850	<0.40
1,1-Dichloroethene	ug/L	0.7	7	<0.27
1,1-Dichloropropene	ug/L	---	---	<0.40
1,2,3-Trichlorobenzene	ug/L	---	---	<0.40
1,2,3-Trichloropropane	ug/L	---	---	<0.40
1,2,4-Trichlorobenzene	ug/L	14	70	<0.40
1,2,4-Trimethylbenzene	ug/L	96	480	<0.30
1,3,5-Trimethylbenzene	ug/L			<0.30
1,2-Dibromo-3-chloropropane	ug/L	0.02	0.2	<0.40
1,2-Dibromoethane	ug/L	0.005	0.05	<0.40
1,2-Dichlorobenzene	ug/L	60	600	<0.40
1,2-Dichloroethane	ug/L	0.5	5	<0.30
1,2-Dichloropropane	ug/L	0.5	5	<0.28
1,3-Dichlorobenzene	ug/L	120	600	<0.30
1,3-Dichloropropane	ug/L	---	---	<0.29

TABLE 6
 Groundwater Quality Test Results - 2016 Phase II ESA and Supplemental Investigation
 West Basin, 30th Street Corridor

Well	Units	NR 140 Preventive Action Limits	NR 140 Enforcement Standards	MW-24
Parameter	Date			01/20/2016
1,4-Dichlorobenzene	ug/L	15	75	<0.30
2,2-Dichloropropane	ug/L	---	---	<0.70
2-Butanone	ug/L	---	---	<4.0
2-Chlorotoluene	ug/L	---	---	<0.40
2-Hexanone	ug/L	---	---	<9.0
4-Chlorotoluene	ug/L	---	---	<0.40
4-Methyl-2-pentanone	ug/L	---	---	<7.0
Acetone	ug/L	1,800	9,000	18
Benzene	ug/L	0.5	5	0.36
Bromobenzene	ug/L	---	---	<0.40
Bromochloromethane	ug/L	---	---	<0.40
Bromodichloromethane	ug/L	0.06	0.6	<0.30
Bromofluorobenzene	% Recovery	---	---	101
Bromoform	ug/L	0.44	4.4	<0.29
Bromomethane	ug/L	1	10	<1.1
Carbon disulfide	ug/L	200	1,000	<0.50
Carbon tetrachloride	ug/L	0.5	5	<0.30
Chlorobenzene	ug/L	---	---	<0.40
Chloroethane	ug/L	80	400	1.4
Chloroform	ug/L	0.6	6	<0.30
Chloromethane	ug/L	3	30	<0.80
cis-1,2-Dichloroethene	ug/L	7	70	47
cis-1,3-Dichloropropene	ug/L	0.04	0.4	<0.29
d8-Toluene	% Recovery	---	---	96
Dibromochloromethane	ug/L	6	60	<0.40
Dibromofluoromethane	% Recovery	---	---	92
Dibromomethane	ug/L	---	---	<0.30
Dichlorodifluoromethane	ug/L	200	1,000	<0.80
Diisopropyl ether	ug/L	---	---	<0.30
Ethylbenzene	ug/L	140	700	<0.30
Hexachlorobutadiene	ug/L	---	---	<0.40
Isopropylbenzene	ug/L	---	---	<0.40
Methyl tert-butyl ether	ug/L	12	60	<0.40
Methylene chloride	ug/L	0.5	5	<0.30
Naphthalene	ug/L	10	100	<1.0
n-Butylbenzene	ug/L	---	---	<0.40
n-Propylbenzene	ug/L	---	---	<0.40
m & p-Xylene	ug/L	400	2,000	<0.70
o-Xylene	ug/L			<0.30

TABLE 6
Groundwater Quality Test Results - 2016 Phase II ESA and Supplemental Investigation
West Basin, 30th Street Corridor

Well	Units	NR 140 Preventive Action Limits	NR 140 Enforcement Standards	MW-24
Parameter	Date			01/20/2016
p-Isopropyltoluene	ug/L	---	---	<0.40
sec-Butylbenzene	ug/L	---	---	<0.40
Styrene	ug/L	10	100	<0.28
tert-Butylbenzene	ug/L	---	---	<0.40
Tetrachloroethene	ug/L	0.5	5	<0.40
Tetrahydrofuran	ug/L	10	50	<1.1
Toluene	ug/L	160	800	0.47
trans-1,2-Dichloroethene	ug/L	20	100	1.1
trans-1,3-Dichloropropene	ug/L	0.04	0.4	<0.30
Trichloroethene	ug/L	0.5	5	<0.30
Trichlorofluoromethane	ug/L	---	---	<0.60
Vinyl acetate	ug/L	---	---	<6.0
Vinyl chloride	ug/L	0.02	0.2	79
Polynuclear Aromatic Hydrocarbons (PAHs)				
1-Methylnaphthalene	ug/L	---	---	<0.19
2-Methylnaphthalene	ug/L	---	---	<0.15
Acenaphthene	ug/L	---	---	<0.19
Acenaphthylene	ug/L	---	---	<0.16
Anthracene	ug/L	600	3,000	<0.10
Benzo(a)anthracene	ug/L	---	---	0.041
Benzo(a)pyrene	ug/L	0.02	0.2	<0.0091
Benzo(b)fluoranthene	ug/L	0.02	0.2	<0.0071
Benzo(g,h,i)perylene	ug/L	---	---	<0.021
Benzo(k)fluoranthene	ug/L	---	---	<0.013
Chrysene	ug/L	0.02	0.2	<0.021
Dibenzo(a,h)anthracene	ug/L	---	---	<0.029
Fluoranthene	ug/L	80	400	<0.0071
Fluorene	ug/L	80	400	<0.061
Indeno(1,2,3-cd)pyrene	ug/L	---	---	<0.024
Naphthalene	ug/L	10	100	<0.18
Phenanthrene	ug/L	---	---	<0.024
Pyrene	ug/L	50	250	0.10
Pesticides				
4,4'-DDD	ug/L	---	---	NT
4,4'-DDE	ug/L	---	---	NT
4,4'-DDT	ug/L	---	---	NT
Aldrin	ug/L	---	---	NT
alpha-BHC	ug/L	---	---	NT
alpha-Chlordane	ug/L	---	---	NT

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 Groundwater Quality Test Results - 2016 Phase II ESA and Supplemental Investigation
 West Basin, 30th Street Corridor

Well	Units	NR 140 Preventive Action Limits	NR 140 Enforcement Standards	MW-24
Parameter	Date			01/20/2016
beta-BHC	ug/L	---	---	NT
Chlordane (Technical)	ug/L	0.2	2	NT
delta-BHC	ug/L	---	---	NT
Dieldrin	ug/L	---	---	NT
Endosulfan I	ug/L	---	---	NT
Endosulfan II	ug/L	---	---	NT
Endosulfan sulfate	ug/L	---	---	NT
Endrin	ug/L	0.4	2	NT
Endrin aldehyde	ug/L	---	---	NT
Endrin ketone	ug/L	---	---	NT
gamma-Chlordane	ug/L	---	---	NT
Heptachlor	ug/L	0.04	0.4	NT
Heptachlor epoxide	ug/L	0.02	0.2	NT
Lindane	ug/L	0.02	0.2	NT
Methoxychlor	ug/L	4	40	NT
Toxaphene	ug/L	0.3	3	NT

Italics = Exceeds NR 140 Preventative Action Limits (PAL)

Bold = Exceeds NR 140 Enforcement Limits (ES)

--- No Established Standards

TMBs combined compared to standards.

ATTACHMENTS

Attachment A

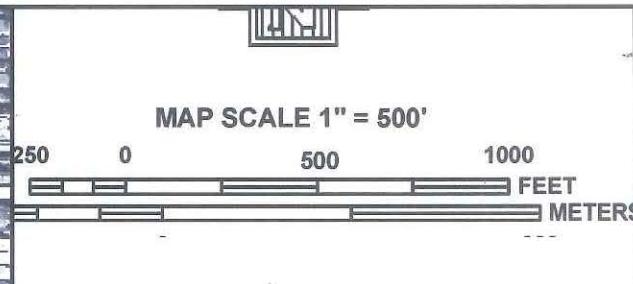
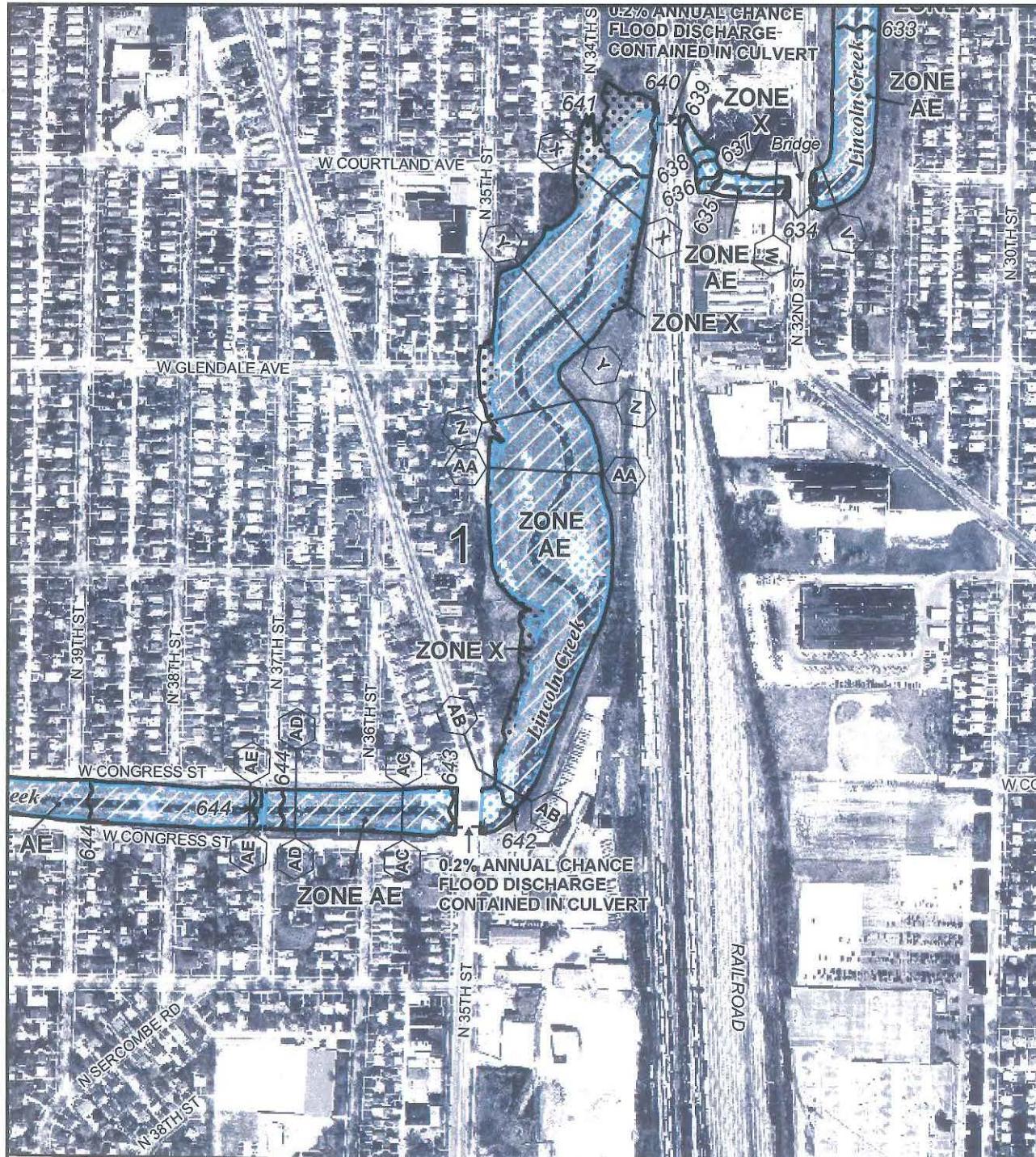
Phase II Environmental Assessment Report

Attachment B

Supplemental Investigation Technical Memorandum

Attachment C

Excerpt of Flood Insurance Rate Map



NFIP

PANEL 0077E

FIRM
FLOOD INSURANCE RATE MAP

MILWAUKEE COUNTY,
WISCONSIN
AND INCORPORATED AREAS

PANEL 77 OF 300
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
GLENDALE, CITY OF	550275	0077	E
MILWAUKEE, CITY OF	550278	0077	E

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER
55079C0077E

EFFECTIVE DATE
SEPTEMBER 26, 2008

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msfc.fema.gov

